

2153480

SEQ ID NO:1730

LENGTH:215

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01948

SEQUENCE DESCRIPTION:

GATCAGCTGA TGGAGCTCCT GATTGACAA AGGAGCTTNC CTCCCTTGAA TGACCTAGAG 60  
CACAGGGAGG AACTTGTCCA GTAGTTTGGA ATTGTGTTCT TCGTAAAGAC TGAGGCAAGC 120  
AAGTGCTGT AAATAACATC ATCTTAGTCC CTTGGTGTGT GGGNNNTTG TTTTTTTT 180  
ATATTTGAG AATAAAACTT CATATAAAAT TGAAA 215

SEQ ID NO:1731

LENGTH:107

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01949

SEQUENCE DESCRIPTION:

GATCGCACCG CCCCTCGCAG AGAGTGTATC ANCTGTTTA TTTTGTAAC AACAAAGTGC 60  
TAAATAATAT TNATNACTTG GTTGGTTNC AAAANC GGAT TAAATGN 107

SEQ ID NO:1732

LENGTH:107

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01950

SEQUENCE DESCRIPTION:

GATCACTGTG GTNTTCATAT TTCTAAAATA AATGAATTAA AAANTTAAN GNCTTAGATG 60  
CTTATCTCTA TCATAGCTCA GAATGCAACT NCAATACCC CATTCTN 107

SEQ ID NO:1733

LENGTH:106

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01951

SEQUENCE DESCRIPTION:

GATCAACTGT ACGCCTTGG TATCTGACCA TAAAGTCTTT TGCTCCGCTG ACATTTGGGT 60  
GATGTCTTCA CATGGAAATA TAATAAAAT AAAATCTAG TTTAAA 106

SEQ ID NO:1734

LENGTH:106

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01952

SEQUENCE DESCRIPTION:

00732

2153480

GATCGAGGCT TCAGTGAGAT ATGGCTGAGA CACTGCTCTC AGCCTGGATG ACAGAGTGAG 60  
AACCTGTCTC AAACAAGAGA AAAAAATAAA TCAAANNCTA TTCAAA 106

SEQ ID NO:1735

LENGTH:151

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01953

SEQUENCE DESCRIPTION:

GATCTGAGGA GGCTTCGTGG GCTTTGGGT CCTCTAACTA GGACTCCCTC ATTCTAGAA 60  
ATTAAACCTT AATGAAATCC CTAATAAAAC TCAGTGCTGT GTTATTG TG CCTCATTCC 120  
CCAGGAATAG TCACTGCCTT GAGGAACCAA A 151

SEQ ID NO:1736

LENGTH:106

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01954

SEQUENCE DESCRIPTION:

GATCCACCCA CCTNAGGCCT CCCAAAGTGC TGGGANNACA GNCGTGAA CCACGGCTTC 60  
GCCAACAAATG GATTTTAAA TTATTCAC GCTCACAAAA AACCTN 106

SEQ ID NO:1737

LENGTH:106

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01955

SEQUENCE DESCRIPTION:

GATCNANCCT CAACACCTAG TGCAATTCTT TTTACACATT AGGNACTTAG TAATTNGGT 60  
TGAATTGTGT TGAACTAACC TGGCGGTATA GGCAAAANTT GGAAGN 106

SEQ ID NO:1738

LENGTH:105

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01956

SEQUENCE DESCRIPTION:

GATCTCCCAT TTCTAGGAAC CCCAGTCCTG CTTCTCCGCA ATGGCACATG CTTCCACTCC 60  
ATCCATACTG GCATCCTCAA ATAAACAGAT ATGTATACAT ATAAA 105

SEQ ID NO:1739

LENGTH:105

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01957

00733

2153480

SEQUENCE DESCRIPTION:

GATCCAAGAG ATATATTGG CAACTTTTC TAGAAAAGGC ACATTGGGTA TAATTCATTA 60  
CATTCTTGAG TTTTTTGGG TTTTTTTTT TTTTTNGNG NNANN 105

SEQ ID NO:1740

LENGTH:107

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01958

SEQUENCE DESCRIPTION:

GATCCAGCTG GAAAGCTGAA GTATTCGAT AAACTGAATT GAGAAATACT TCTTCAAGTT 60  
ATGATGCTTG AAAGTTCTCA ATAAAGTTCA CGGTTTCATT ACCNAAA 107

SEQ ID NO:1741

LENGTH:119

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01959

SEQUENCE DESCRIPTION:

GATCTTAAGG TATCAGTATT TCAGAACCTT GCGACGATT TATTCTAAA TTCATGTACT 60  
GTATGTCCAT AAGTAAAAT AAAATNTCAT ATTCTTTCT ATNATTGGTA TCATTCAA 119

SEQ ID NO:1742

LENGTH:114

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01960

SEQUENCE DESCRIPTION:

GATCCTTAGC TCTTGCTCT ATGCCCTTC CTCATCAGGG GACCGTTCC CCCCTCTCC 60  
TTCACAGTAT TTAAGAAAATA AAAGTCGGAT TTNCTGGCT GCTTTCTCTC TAAA 114

SEQ ID NO:1743

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01961

SEQUENCE DESCRIPTION:

GATCGCCCCA TTGCACTNCA ANCTGGACAG CAAGAGAAA ACTCCGTNTC AAAAAACAAA 60  
AACAAAANCA AACAAAAAAN TTCCCTGAG AGAAAACCTA TN 102

SEQ ID NO:1744

LENGTH:101

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01962

00734

2153480

SEQUENCE DESCRIPTION:

GATCACACAC TAAGAGAACG TTGATTGCCT CGGCTATTGT GCTGGCTGGA CACTTGGTC 60  
ACTTTGAAG CATGTTAATA AATGTCACTG ATTAAAACAA A 101

SEQ ID NO:1745

LENGTH:100

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01963

SEQUENCE DESCRIPTION:

GATCCAAGTT TGAAAACAAT TTTAGGCTAC TAGATATGAA CAACATCTG ATTATGAGT 60  
TGAAGGAAAT TAAAGATGAA TGGTTTAATT AAAAATTAAA 100

SEQ ID NO:1746

LENGTH:99

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01964

SEQUENCE DESCRIPTION:

GATCAAATTA ATAATTCAA GCCCTGCCTT CAAAATGAAA TTTTTTTTT AGTATTATTT 60  
AGCAAAANCA ATAAAACCCA AATTTTTTA ACCATCAAA 99

SEQ ID NO:1747

LENGTH:97

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01965

SEQUENCE DESCRIPTION:

GATCACTTCA AGCAAGCCCC CATGATGGTT CTCAGTCCTG CTTCTCTGTG GGTACGTGCC 60  
CCTCTGTTA AAAATAAACT GAATATGGAT GTTTAAA 97

SEQ ID NO:1748

LENGTH:100

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01966

SEQUENCE DESCRIPTION:

GATCAAAATG AAAACCTGTT GATGTGAATT CAGTTATTGA ACTTGTTACT TGTTTTGCC 60  
AGAAATGTTA TTAATAAAATG TCAATGTGGG AGATAATAAA 100

SEQ ID NO:1749

LENGTH:95

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01967

00735

2153480

SEQUENCE DESCRIPTION:

GATCTGATGT TCCTTTATT TATAACAATG TTAAATGCAA TTGCTTGTA CCTTGAGTTG 60  
AGTATTACAC ATAAAGTAA AGTACAAGCT GTAAA 95

SEQ ID NO:1750

LENGTH:94

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01968

SEQUENCE DESCRIPTION:

GATCCAGAAG TAAATGTATC TNCAAGCTGA TTTAAATTGT AGATTTNNTC TTCATTGCAT 60  
ATTTNCTGAT GTGAAATAA GTCTGAGTAT TAAA 94

SEQ ID NO:1751

LENGTH:89

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01969

SEQUENCE DESCRIPTION:

GATCCAAGT ATATTTTAC TGAGAATATA TCTGAAAAAA TTTGAATTGA GATTAATTT 60  
TTAAATGAAA TATATTTACT TTTTTAA 89

SEQ ID NO:1752

LENGTH:89

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01970

SEQUENCE DESCRIPTION:

GATCCTGGCC CCTCAACCTC CTGTGGAACC CAGCAGTTCT GTTATATCCC CTGCTACCC 60  
AGATGAATTA AGACGGTTAA ATACTGAAA 89

SEQ ID NO:1753

LENGTH:89

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01972

SEQUENCE DESCRIPTION:

GATCTGTCTT GCTTATTGTT GCCCCCTGCG NCTAGCACAA TTCTGACACA CAATTGGAAC 60  
TTACTAAAAA TTTNTTTTA CTGTTAAA 89

SEQ ID NO:1754

LENGTH:87

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01973

00736

## SEQUENCE DESCRIPTION:

GATCATATGG TAGTTTGTT TTACTAATCT AAGGGTACTA GCATCTACAA TNATATAGAC 60  
AAAATAAAAT ATTCCTTAA TGCAAA 87

SEQ ID NO:1755

LENGTH:85

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01974

## SEQUENCE DESCRIPTION:

GATCTGTCTT CTCTAAAATC TTACCATATT GTCTGTATAT GGTTGTAAT NCAAATGGAA 60  
AGTAAACGT TTTGCCCTG ATAAA 85

SEQ ID NO:1756

LENGTH:88

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01975

## SEQUENCE DESCRIPTION:

GATCCTGCTG GAAACCACGG CAACCTGTAT CCACATTAG GAGGTAAGAA TCAATAAAAT 60  
GGCCCATCTCA TTTGTGTTGT AGCTCAAA 88

SEQ ID NO:1757

LENGTH:84

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01976

## SEQUENCE DESCRIPTION:

GATCTACAAAC ATATAAAATT GTGTATTTTC NTTTGGTTGT CCCTATTAAC AAAAAGTAT 60  
TTNAATAAAAT ANTTGAAATG NAAA 84

SEQ ID NO:1758

LENGTH:82

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01977

## SEQUENCE DESCRIPTION:

GATCCCCTTG AAAAAATTGGA AATGGGCAGT TCTGAATTTT CACGTTGAA ATGTAATAA 60  
TAAACTTCAG TCAATATCCA AA 82

SEQ ID NO:1759

LENGTH:82

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01978

2153480

SEQUENCE DESCRIPTION:

GATCTGGACG TTCACGTGCA CTCTCTTCCT GTACAGTATT TATTGTTCCCT GGCACCTTAT 60  
TTAAAGATAT TTGACCCCTCA AA 82

SEQ ID NO:1760

LENGTH:81

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01979

SEQUENCE DESCRIPTION:

GATCCTTACT CCTGCATTGT TCTTTGCCAG NGNCCTATT AAAAATTAA AAATTCTCAT 60  
TAAAGTCAGC TTGGGTTAA A 81

SEQ ID NO:1761

LENGTH:79

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01981

SEQUENCE DESCRIPTION:

GATCTAAAGA GAAAAGGGAG AAGAGGGAAA AAGGAAACAA AGGAGAAGAA AGAGGGAAAG 60  
GAAAAAAAAG AAAAAGAAA 79

SEQ ID NO:1762

LENGTH:79

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01982

SEQUENCE DESCRIPTION:

GATCATGAAA GGTGATAAGC TCTTCTATGA TAGGGGAAGT AGCGTCTTGT AGACCTACTT 60  
GCGCTGTTGT ACTCTGAAA 79

SEQ ID NO:1763

LENGTH:80

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01983

SEQUENCE DESCRIPTION:

GATCAAATAT TTTGCCTTNT ACTNAAATCA GCCAGCCCAT NACCCCCAAT AAAGGGCAGC 60  
TGCCTCTGCT CCCTCTGAAA 80

SEQ ID NO:1764

LENGTH:79

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01984

00738

2153480

SEQUENCE DESCRIPTION:

GATCAAATT CTTAACCAA ACAACAAAAA TGTACATTTC TGTTTTCCCT TTTAATAAAC 60  
AGGTGTACTC TTTATCAAA 79

SEQ ID NO:1765

LENGTH:78

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01985

SEQUENCE DESCRIPTION:

GATCTAGTGT CCTTTTGTA CACTAACAG GTGAATGCTG ACTTTTTCA TTCTCCAATA 60  
AATNTCACTG AACTGAAA 78

SEQ ID NO:1766

LENGTH:75

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01986

SEQUENCE DESCRIPTION:

GATCTTTGTT TAGTTCAAG TCTTTTATA ACTAAATCTG CTGGCATTAG ACAATAAATA 60  
CATTTTCAAA ATAAA 75

SEQ ID NO:1767

LENGTH:75

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01987

SEQUENCE DESCRIPTION:

GATCATATAT ACTTGATAA TATCATCCCT TCCCTTGATT TCTTCAATC TAAAAATAAA 60  
TATGAGAAAA ACAAA 75

SEQ ID NO:1768

LENGTH:78

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01988

SEQUENCE DESCRIPTION:

GATCGATATT AATGTATCCA ATGAAATAAT CGACTTGTNC TTGATAGCCT CATAAAGCA 60  
TTGGTTTN CACATAAA 78

SEQ ID NO:1769

LENGTH:74

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01989

00739

## SEQUENCE DESCRIPTION:

GATCTGAGCC CCCAAGATGG AGAATGGGA GGAGCTTTT ATGGCGGACT GATTAAAACT 60  
CTTAAGCATT TAAA 74

SEQ ID NO:1770

LENGTH:72

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01990

## SEQUENCE DESCRIPTION:

GATCTGCTTG GCCTTGATAA CCTATGTTGT TGCACTTAA ACATTTAAAT TATACAATCA 60  
TCAACCCCCA AA 72

SEQ ID NO:1771

LENGTH:69

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01991

## SEQUENCE DESCRIPTION:

GATCCTCCCC TTCAAATGAC TGTAATTAAC AACACTAAA AAACCTGAAT AAAATATTGA 60  
AACCTCAAA 69

SEQ ID NO:1772

LENGTH:68

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01992

## SEQUENCE DESCRIPTION:

GATCTATTCT GAAGCTGTC ATTGTTAAC AATAAAATGT TACAGGTTTC ACATGATTAA 60  
TTCTCAAA 68

SEQ ID NO:1773

LENGTH:66

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01994

## SEQUENCE DESCRIPTION:

GATCCGTAAC TNCGGGATAA GGATTGGCTC TAAGGGCTGG AGAAGGAATG AATAAAAAAA 60  
AAGAAA 66

SEQ ID NO:1774

LENGTH:67

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01995

2153480

SEQUENCE DESCRIPTION:

GATCCCATGT CTCTGCCAGG ACCAAGGCNG ATGTTCCCC ACTAATAAAG TGCCGGGTGT 60  
CAGCAAA 67

SEQ ID NO:1775

LENGTH:65

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01996

SEQUENCE DESCRIPTION:

GATCCTTTT AATACCACAG CATTGTACT GTTCCTTTT AATATACTGA AAATATAAAA 60  
GGAAA 65

SEQ ID NO:1776

LENGTH:71

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01997

SEQUENCE DESCRIPTION:

GATCCGATTA TTTCTGCCAG TNTATTTGG NCACTTATA ATCATTAAAG CACTTCTTG 60  
GCAGGCNCAA A 71

SEQ ID NO:1777

LENGTH:72

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01998

SEQUENCE DESCRIPTION:

GATCTTACAA TAATGTTCCA CTCTGCAAAT TTTAAGGTT CAAATAAGT TTAATTGTTT 60  
GCAAACGTAA AA 72

SEQ ID NO:1778

LENGTH:65

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01999

SEQUENCE DESCRIPTION:

GATCATGCA CCATGTCAGA CTTTGTATA TNCCTTGAAA ATAAATGAAA GTNAGAATCN 60  
TCAAA 65

SEQ ID NO:1779

LENGTH:62

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02000

00741

## SEQUENCE DESCRIPTION:

GATCCTGTCC TGATTCTCAA AAATTATTTT CTCTGTATGA TTAAAAGTTT ATTCCATTAA 60  
AA 62

SEQ ID NO:1780

LENGTH:66

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02001

## SEQUENCE DESCRIPTION:

GATCCCTCA TTTGAATATT AATGGCTTT TCCATTAAG AATAAAATAT TTTGGACAAT 60  
GCCAAA 66

SEQ ID NO:1781

LENGTH:68

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02002

## SEQUENCE DESCRIPTION:

GATCAAATTT ATAAGTTATT ATTTTAATT TTCTAAATTA AATAAAAGAA AGAATGCAA 60  
CCAGGAAA 68

SEQ ID NO:1782

LENGTH:59

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02003

## SEQUENCE DESCRIPTION:

GATCAATAAA GAGTAATTTC TTGCTAAATA AATAAAAGAA ACCTTGTGA AAAACTAAA 59

SEQ ID NO:1783

LENGTH:59

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02005

## SEQUENCE DESCRIPTION:

GATCTGAATN ATGCACCCCCA CCCCCACCCC AATAAAGAAA TAACAGAAAA CCCTCGAAA 59

SEQ ID NO:1784

LENGTH:58

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02006

## SEQUENCE DESCRIPTION:

GATCTTCATT TTTTTTTA AACTTGGCGT TTTTGAAATA AAAACCTTT GTCTAAA 58

2153480

SEQ ID NO:1785

LENGTH:59

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02007

SEQUENCE DESCRIPTION:

GATCTCAGTT GTAAATAGAA AAATCTAATT CAATAAACTC TGTATCAGCC CCCAACAAA 59

SEQ ID NO:1786

LENGTH:52

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02010

SEQUENCE DESCRIPTION:

GATCCAAGT CATGTGTCCA CACATTATA AATAAAAATT TTACCTATGA AA 52

SEQ ID NO:1787

LENGTH:51

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02011

SEQUENCE DESCRIPTION:

GATCCAGTGA AGCCAGAACG CAAATAAACT CAAAAGCTGT CTCCCCACAA A 51

SEQ ID NO:1788

LENGTH:54

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02012

SEQUENCE DESCRIPTION:

GATCCTAATT TATGCCATG CAAAAAATAA ATAACGCCCA AGAGCTGTGG GAAA 54

SEQ ID NO:1789

LENGTH:53

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02013

SEQUENCE DESCRIPTION:

GATCGCCTAG TATGTTCTGT GAACACAAAT AAAATTGATT TACTGTCTGC AAA 53

SEQ ID NO:1790

LENGTH:58

TYPE:nucleic acid

TOPOLOGY:linear

00743

2153480

CLONE:HUMGS02025

SEQUENCE DESCRIPTION:

GATCCGTAGT AATAAATTCT CAGAGGACTC AGCCTTCCT GCGGGTCTGG AGCTAAA 58

SEQ ID NO:1791

LENGTH:597

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02039

SEQUENCE DESCRIPTION:

GATCAGAGTC TCTGGGCAT TTATATTTT GCATTCTGAT GTACCTAGGA GTTTGTTAA 60  
ACAGATGATG TATGTNAGTA TTATCCCAT TTTATGCAAT TAACCAAATC AACCAAAAAA 120  
AGTGACCAGT AAGTCCTGTA TTGTNTTTT TACTACATGT AGGAACCTCTC ATGTGAATGA 180  
GTACTGTAGT AATCCATTCT ATGGGAGCCT TATTCAGAA ATATTCAAA CTGGTGCAAA 240  
TGGAAAAGAC TTTCTCTTT CCTTTAAAGC TAAAGACAAG AATATCATGC TATACAGGTG 300  
CAACTCAATC CCCGTTAATA AAAACCAATG TAGGTATAGG CATTCTACCC TTTGAAATAG 360  
CTGTGTCCC ACCTGTTGCC ATTGATTTT TGGAATGGC TTTAGGAAAT ATCCAAGTTG 420  
TCCTTGGAAAT TGTCTAACCA TGGNCATAAA CAGTTGTCTC CCTTCTACTT GTGTAGAATA 480  
CTTGGNCTT AATTTCCTN CCAGATACAG GGGGGTACCT GCCTGTTTT CNAAGGGTTT 540  
ATTACTGGNG GTACCATTTG GTAGGATTGT TTTAAATAAA AAAACCTGGT TTTAAA 597

SEQ ID NO:1792

LENGTH:518

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02040

SEQUENCE DESCRIPTION:

GATCCAAAC TGGACCCTTG GAGCCGTCGA CTCACAGATG GATGACATGG ACATGGACTT 60  
AGACAAGGAA AAAANNCAGG ACTTGAAGGA GCTCAAGGTG CTAGTGGCTG ACAAGGACCT 120  
TCTGGACCTG CACAAGAGCC TGGTGTGCAC TGCTCTCCGG GGAAAGCTGG GCGTCTTCTC 180  
TGAGATGAA GCCAACTTCA AGAACCTGTC CGGGGGCTG GTGAACGTGG CCGCCAAGCT 240  
GACCCACAAT AANGATGTCA GAGACCTGTT TGTGGACCTC GTGGAGAAGT TTGTGGAACC 300  
CTGCCGCTCC GACCACTGGC CACTCAGCGA CGTGCCTTTC TTCCTGAATC AGTATTCAAGC 360  
GTCTGTCCAC TCCCTCGATG GCTTCCGACA ACAAGGCCCT CTGGGACCGC TACATGGCA 420  
CCNTTCCGNG GCTGNCTNCT GCGGCCTGTN ATCATGACTG AGGTGGCCTN CCAAANGTTN 480  
CGCCCAAGGT TGACAATAAA GTTGCTCTGA GTTTGAAA 518

SEQ ID NO:1793

LENGTH:513

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02041

SEQUENCE DESCRIPTION:

GATCTGTAAT TTTAATTTT ACCCTCTGTA CCCCATGACC TTATCCTTCC TCTCCTTCT 60  
TGTTACCCAT GAAAAACTGG CAACATTCCA AGAATAGCAT CTGTACAAAG GGGAAAGAAC 120

00744

2153480

ATAAAGGTAA AACAAAACAA AACAACATTT TGAGAACAAA GATGACCATA ACCACTGAAG 180  
GGAATCACAT CTTTAAGAC AAATTCAAT TCTTTTATTG GTTATGGCAG ATGACAAGAT 240  
GGTACAACCT TTATTCTTT NCAAAATAAA ACAAAGGGCA CAGCATCTGT AGTCAGCCGA 300  
CAACTATTNC GGCGTTTG GGGTNGGTCT NGCCGTACTT GTGATTTCGA TGGTACGTGA 360  
CCNTNTCTG GAAGGCTTGC CCCNTGCCG GTGTACATAG GTGCATTGGT TNCTNTGGGA 420  
GGGGCCAAG NACTTTNGG CNANNGTGT ACTGGTATTG TNATGAAATT TNCGGTTGGN 480  
CCTCTTGNNA NTTTTNTG CANGAANGNN GGN 513

SEQ ID NO:1794

LENGTH:499

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02042

SEQUENCE DESCRIPTION:

GATCTCTAA GAGATGATGG ACTCATGTAT GTCACCCGAC TTCGCAACAC TGGGGITCAG 60  
GTGACTCATA ACCATGTTGA GGATGGATT CATGGAGCAT TTTCATTCT GGGACTTAAA 120  
ATTAGTCACA GACTTATAAA TCAGTATATT GAGTGGCTAA AGGAAAATCT ATAGTAAAAC 180  
ATGTAGCTAT AACATATTTT AAAAATAAAA TCTGAAAACC TCAGAAAATT TGCATTAGAA 240  
ATTGGTCTT CTTAGAATGG TCTAGTTAAG TTCCACATGT AGCATAATTC TAAATAGGC 300  
ACTTTCTGT TTTTTTNTC TNACTGTGGG ATTTCATNNC AATTTCTAC ATTGTCTATC 360  
TGCTTTNCT GNGATTTCC NCTTACACTG TTAATCTNAT TTTAAAAAAA TGTACATNCC 420  
NNGNANACNT TAANTTGGG GAGTTNGGCT ACNANTTNAC GGTTGCCAGG GGGNTAAAT 480  
GGTGGGCCA ATTTTAAA 499

SEQ ID NO:1795

LENGTH:483

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02043

SEQUENCE DESCRIPTION:

GATCAAAGCG CCACGCCCT GCACCTCCTG GGCGCGTGG CAACCCCTG NGCACAGCAT 60  
GAGGCCAGGG NCCCAGAACAA CAGTGCCTGG CAAGGCCTCT GCCCNTGGCC TTTGAAANAA 120  
AGGCCAGCAG CAGATAACAA CCCCCGACAA ATCAGCGATG TGTCACCCCC AGTCTCCAC 180  
CTTTCTCT AATGAGTCGA CTTNNNGCTG GAAAGCAGCC GTTCTCCTT GGTCTAAAGTG 240  
TGCTGCATGG AGTGGACAGT AGAAGCCTGC AGCGGCACAA ATGCACCTCC CAGTTGCTG 300  
GGGTTATTTT AGAGAATGGG GGTGGGGAGG CAAAGAACCA GTGTTAGCG CGGGACTACT 360  
GTTCCAAAAA GANTTCAAC CGNCCAGNTT GTTGTGAAA CAAAAAAGTG TTNCCTTTT 420  
CAAGTTTGAG AACAAAATT GGGTTTAA AATTAAGTA TACCAATTG TGCAATTGNC 480  
AAA 483

SEQ ID NO:1796

LENGTH:481

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02044

00745

2153480

SEQUENCE DESCRIPTION:

GATCCAAAC GCTTCGAGGC ACCCCAAATT ACCTGCCCAT TCGTCAGGAC ACCCACCCAC 60  
CCAGTGTAT ATTCTGCCTC GCCGGAGTGG GTGTTCCCGG GGGCACTTGC CGACCAGCCC 120  
CTTGCCTCCC CAGGTNNNNNA GCTCTCCCTT GGGCCACTAA CCATCCTGGC CCGGGCTGCC 180  
TNGTCTGACC TCCGTGCCTA GTCTGGCTC TCCATCTTGT CTCCCTCCCCG TGTCCTCCAAT 240  
GTCTTCAGTG GGGGGCCCCC TCTTGGGTCC CNTCCTCTGN CATCANCTGA AGACCCCCAC 300  
GGCAAACACT GAATGTCACC TGTGNCTGCN GNCTCGGTCC ACCTTGCAGGG CCCTGTTTGA 360  
CTAAACTTNA ACTTCTTTA ACGGTAATAT TTCCGGCAAA AATCCAATGG TTTGGGTTTT 420  
GGTCTTTAA CNTTGAAAC GGTTGCAAAT CCAAATAAAA GCAATTAAAA AGTCAATGAA 480  
A 481

SEQ ID NO:1797

LENGTH:462

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02045

SEQUENCE DESCRIPTION:

GATCTAAAAG GGTTTCTTA GAAAGGGCAA TATTGTCCAA TGAAGTAAGC AGAAGGACTC 60  
TGGGTTAGAA GCATCTGCAC AAAAACTGGT GAGACCTACT CTCCACTGCT CTGCAGCTGG 120  
ATGGCTGATG GCAGGCTGAG CAGTGGGAA GCAGGTTTA ACAACAGGGA GTCTTCCAG 180  
GTCACTGTAT ATTGNGAAGA AACATAAAAAC TATTGTCTGT TACATTCCGA GGTCAGCCTT 240  
CTNCTTAACG TTTTATAATA TGCAAATNCC AGCTTCTGGA AAGCANGTAT CATCATGTAC 300  
CAAATGCTTT ATACACCATC ACATTATGA NTTTTTNAGC ATGGTCAGAN CTTGTGTAAA 360  
TATGTCTCTT AGGATGATTG TGGGGGAGGA TGTGATTAT TTTCCATAAT TTCCAAANTN 420  
GCATTTCCA TTTCAAAATA AGGNTAATCT NTTGGGGCCA AA 462

SEQ ID NO:1798

LENGTH:448

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02046

SEQUENCE DESCRIPTION:

GATCAGCCTG CAGCCATCCC CCGACCCCTGC TGCTAGGCCA CGGTCTGCAC CCTGGGGCCT 60  
CATCTCCCCC AGCCCACCTTG TTTCCCCCCC TTTTATTCCC TAGGCCCTTT TCAGACTCCT 120  
GGGCCCTTGG NNNCTCTCT CCCATCTCCC TTCACAGGAT GACACCCCTCC CATAACCCAT 180  
AGCTGGGGCC AGCAGGTTCT GCTGAGGGTG GGGCTGGTGT AGGGACCCCC AAGAGACCCC 240  
TGTCCCTGTCC CTTCAACCAGT CCTGGGGAGG CTGGGACTCC CCCTGCCACA AGCCTGGGCC 300  
ACAGTTCACA TTCCACTGCT GGGAGAAGAA ACAGGCCAG GCCCAANAGT GGCCTGCC 360  
CGGGAGCCAA AGACCCNAGT GGCCACANTG GGATTAGGGT NGGGAGGNT TGGNAGCGCT 420  
NTTTTATAAA ATATTATACA TAAGGAAA 448

SEQ ID NO:1799

LENGTH:448

TYPE:nucleic acid

TOPOLOGY:linear

00746

2153480

CLONE:HUMGS02047

SEQUENCE DESCRIPTION:

GATCTGGTTG GTGGATGAAC AAGTGTCA CG CTGGCCATCT CAATGGNGTT TATTACCAAG 60  
GTGGCACTTA CTCAAAAGCA TCTACTCCTA ATGGTTATGA TAATGGCATT ATTTGGGCCA 120  
CTTGGAAAAC CCGGTGGTAT TCCATGAAGA AAACCACTAT GAAGATAATC CCATTCANCA 180  
GACTCACAAT TGGAGAAGGA CAGCAACACC ACCTGGGGGG AGCCAAACAG GCTGGAGACG 240  
TTTAAAGAC CGTTCAAAA GAGATTTACT TTTTAAAGG ACTTTATCTG AACAGAGAGA 300  
TATAATATT TTCCTATTGG ACAATGGACT TGCAAAGCTT CACTTCATT NNNNGAGCAA 360  
AAGACCCCAT GTTGGAAAAC TCCATACCAAG TTTATGCTG ATTGATAATT TATCTACATG 420  
CATTTCAATA AACCTTTGT TTCTAA 448

SEQ ID NO:1800

LENGTH:432

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02048

SEQUENCE DESCRIPTION:

GATCTGAATT ATCTGGCAC CTCCTGAATG GAACCCCAGA GTACCTCCTG TGTGGAAGGG 60  
TCCTGGATT TCCCTAACAC CCACCCCTCTC CCCCTTCAGC CATGCTGATG GCAGAGAAGA 120  
TAAGAACTTG GAGCCCATT CTCACTGGAG AGGAAAACCT GTCACTGGC TTTGCGGAGA 180  
AGGTTCCACC TTACGCTCGT AGTACATTAT CTTTACTATG TGCTAGGATA TCATATTTAA 240  
AAGGACAAAA AAATGTAAA TACTTGAATG AGCTTGTATT ATANCATTAA TATTATNNNG 300  
NGTATCTGCT TTCCAGGCTG AAGTGTATTCA TTCATTATTC TAGTCCTGCT TTAGTCCTTT 360  
GTAATTGTG GTAATTATGC TTTCTTTT AATACAAAAA AATGTATAAA ATAAACACT 420  
TGAAAAGGCA AA 432

SEQ ID NO:1801

LENGTH:430

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02049

SEQUENCE DESCRIPTION:

GATCCGNGCG AGGGCACACAG CGGNTCACCT ACAGCGCACT GTCGATGGCT GCACGAGTCA 60  
CACCGGAGCC TGGGGCAAGA CAGTGATTGA ATACAAAACC ACCAAGACCT CCCGCCCTGCC 120  
CATCATCGAT GTGGCCCCCT TGGACGTTGG TGCCCCAGAC CAGGAATTGCG GCTTCGACGT 180  
TGGCCCTGTC TGCTTCTGT AAACCTCCCTC CATCCCAACCC TGGCTCCCTN CNACCCAACC 240  
AACTTNCCTT CCAACCNNGG AAAACAGACAA GCAACCCAAA CTGAACNNN TCAAAAGCCA 300  
AAAANTNGGG AGACAATTTC ACATGGACT TGGAAAAATA TTNTTTCTT TTGCATTATC 360  
NTNTCAACT TAGTNTNTA TCTTGANCA ACCGGANCAT GGCCAAAAAN CAAAGGTGC 420  
ATTCCANCTN 430

SEQ ID NO:1802

LENGTH:428

TYPE:nucleic acid

TOPOLOGY:linear

00747

2153480

CLONE:HUMGS02050

SEQUENCE DESCRIPTION:

GATCCCAAGG GAAAGATGAT TTGTATGTT AAGTGAATGC ACAAGTAAAA GTCCAATGTT 60  
GTGTGCATGA AAAGGATTCC TTGGTTATGT GCAGGGAATC ATCTCACATG CTGTTTTCC 120  
TATTTGGTTT GAGAACACGG CTGACACTAT TCTCTTGAT TAGAAAATAA ACTCATAAAAA 180  
CTCATAATGT TGATATAATC AAAGATGTAAC CACTATAAT ATGTAGAAGA GGNCGTTTA 240  
AAAGACCTTA AGCTGGCATT GTGAAGGAAC ACCATGGTAG ACTCTTTG TAAATGTATT 300  
TTGTATTAA TGAAATGCAG TATAAAGGTT GGTGANGTGT AATATANTTG TGAAACAAA 360  
TCCTGTAAAT AGAGAGATGT ACAGAATCGT TTTGGTACT GTATCTGGA AACCTTGTG 420  
AAAATAAN 428

SEQ ID NO:1803

LENGTH:401

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02051

SEQUENCE DESCRIPTION:

GATCAAAACC AAACTGTTCA ATGTGACAGT CTGAAAATTA TATACTCTAC TTCATTGATG 60  
TTACACTTT TTCTACTCCT TACCTGCTTT TACTAATGCA TTTATCCCCA AGAAAACATC 120  
CAACAATATG GGACTAATTG GGAACAATAT CCAGCAATTG GTATTTAAAT AATTACTGG 180  
TTACAAAACA ATATTATGAC CAGACTCCAT TTTAGAAAAA ATAAATCTG CATCGAAAAG 240  
GGCCTTAAAAA AATAGATTTC TAAAATCAAAT ATCATGGTTG GCTCATGGGT GGGATTATTA 300  
GTGTTCCCTTA TAGTAGTTG TCTGGATGTA CTTTCTGATT CTCCTGTAAT AAGCATGCAT 360  
TGCTTTGTA ATGNGGAAT AATANACCAA TAAAAAGGAA A 401

SEQ ID NO:1804

LENGTH:396

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02052

SEQUENCE DESCRIPTION:

GATCCGGCTG CAAAATTCAT ACCAACCAAC AAATAAAGGA AGATACAAAG TCTTATAGAC 60  
ATCCGGAAAA AAGATTTTA CCTGTGCTGG TCTATGATGT ATGTGGCACT TGCTGTCTGC 120  
AGTTTACAAT GTATTGTAAGA TGAAGATTTT TTAAATTCTA TCTTGCTGNT TNNNNNTNAA 180  
ATATAAGAAA CTGGTACTTG GTAAAGAAAT CTGTCCGTAA GTACCCCCAC AATCAGTCAA 240  
ACTATATTAA AAGCCAGCCT GTTTTCAGAG TATGATGTCC TTTAATGTAA ACTCAAATAT 300  
CAATATTAA AATGTCCGGA TAATATTCTA GAGGTTAAA AAATGGAAAT ATTTGANCTT 360  
TCTATTGAAG ACAATAAAGG TACACAAAGTC GTTAAA 396

SEQ ID NO:1805

LENGTH:392

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02053

SEQUENCE DESCRIPTION:

00748

GATCAAGAGC AGTGCTTCTC CATTGTTTT GCAGAGAAAT GTTTTCATT TCCCGTGTGT 60  
 TTCCATTTC CTCTGAAATT CTGATTTAT CCATTTTT AAGGCTCCTC CCCATCTCCT 120  
 TTCTTAAGGC ACTGTTGCTA TGGCACTTTT CTATAACCTT TTCATTCTG TGTACAGTAG 180  
 CTTAAAATTG CAGTGATTGA GCATAACCTA CTTGTTGTA TAAATTATTG AAATCCATT 240  
 GCACCCGTGA AGAATGGACT TAAAAGTACT GCTGGACAGG CATGTGTGCT CAAAGTACAT 300  
 TGATTGCTCA AATATAAGGA AATGGCCCAA TGAACGTGGT TGTGGGAGGG GAAAGAGGAA 360  
 ACAGAGCTAG TCAGATGTGA ATTGTATCTG TN 392

SEQ ID NO:1806

LENGTH:389

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02054

SEQUENCE DESCRIPTION:

GATCCTATTT GGTATGTTTT TGTCCACTGT TATGATTCAT CATGTATCTT ACAAGAGCCA 60  
 CTCAAAGCAAG ACTCTGCTTC TATGTATGGT GAGGCCCTGT TGTCTAGGC TAGAATAAAC 120  
 TCTTTGTATG CCTCAGTGAA TATGCCAGGT AAAATATATG CAGTCAAGAA TGAATTATTT 180  
 TTCTGACTAA AGTGTGTAGC AGTAAGTTCA AAATNGTGCC CTTGTTTAA CAGTTCTGT 240  
 CAACATCTTC TCATTTTCC CTACAAAAAC ACCAGGGTGT ATTATAAGTA CTGCCTGTGA 300  
 GAATTGACAC TTTATGTATT TGTGTGTGGG ATTTCTGTG GTTTAGCCA AATGAAGTGT 360  
 TATCNNTAAT AACCAGGTCT CTTCATAAA 389

SEQ ID NO:1807

LENGTH:388

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02055

SEQUENCE DESCRIPTION:

GATCCAATTG ATGTATATGT TTATATACTG GGTTCTTGT TTATATACTT GGCTTTACT 60  
 TTATTAATAT GAGTTACTGA AGGTGATGGA GGTATTTGAA AATTTACTT CCATAGGACA 120  
 TACTGCATGT AAGCCAAGTC ATGGAGAATC TGCTGCATAG CTCTATTTA AAGTAAAAGT 180  
 CTACCACCGA ATCCCTAGTC CCCCTGTTT CTGTTCTTC TTGTGATTGC TGCCATAATT 240  
 CTAAGTTATT TACTTTTACCA ACTATTTAAG TTATCAACTT TAGCTAGTAT CTTCAAACCTT 300  
 TCACTTTGAA AAATGAGAAT TTATATTCT AAGCCAGTT TCATTTGGT TTTGTGGTTT 360  
 TGGGTTAATA AAACAATACT CAAATAAA 388

SEQ ID NO:1808

LENGTH:379

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02056

SEQUENCE DESCRIPTION:

GATCTTTCC ACCAGCACCC AGAGTGTCTT CTTCTGGC AAGGTGTGCG ACCCCACGAA 60  
 ACCATAGCCC TCCCAGGGCT GCTCATCTGT TCCAAGCAGG AGGATGTGGC AGGGGAGGGC 120  
 TGGGAGTGAG TAGCTCTGTG TTAGAGTTG GGGACAAGGA TGACACCGAA GTCCAGGAGT 180

2153480

CCAGGACAGC AGGTGCTGGC CGGTGGGGAG CGGGGAGGGG CACTGAGATG GGCAGGGCCT 240  
GGACATTCCA ACCCTGGTG CTGTGCAGCC TCTGGCAGAG CATCCGACCT CTTGGAGCAA 300  
GTTTCTGCCT CTGGAAAGGG GGCGGGCCCT TTTCACAACA GGCTGGTTG TACCGAGTAA 360  
ACAAACACGNT GCCATGAAA 379

SEQ ID NO:1809

LENGTH:379

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02057

SEQUENCE DESCRIPTION:

GATCCTAGGG GGTTTTGTTT GGTTTTNAAT TGTGAGGAAT AAAAAATNTT CTGCCACAC 60  
TGGCATTATA AGGTGACTGA GGTCAAACGT TGTTTCCTTA GGTTGAAATA GCAGCCAAAA 120  
CATTCTTNAC GCAGGGGCTT GGGATATGGC TGCTGGCAAC ACATTTGTT GTGGGCTCCT 180  
TAATTTAATG ATAAAATTTA AGCTAAACAC AAGCCAAAAA TGAATAGGTT TTTNAATT 240  
TNATTTTCA CTAAACAGGC AATTGAAATA CATGGTACAA AAATAAGTGG TAAGATAATT 300  
GTAAAATGGA AATGGGCAGA NTATTCAATT TTCCATCTAT GNAAATTT NCATAAAC 360  
TCATAGNNTT CTTTGNAAA 379

SEQ ID NO:1810

LENGTH:358

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02058

SEQUENCE DESCRIPTION:

GATCNGTCA GCCCTGAAAA GTCCAAACTC CCAGGTATTG TTGCAGAAGG NCGAGATGAC 60  
CTCTATAAAT CAGATGCATT CCATAAGGCA TTTNTGAGG TAAATGAAGA AGGCAGTGAA 120  
GCAGCTGCAA GTACCGCTGT TGTGATTGCT GGCGCTTCGC TAAACCCCAA CAGGGTGACT 180  
TTCAAGGCCN CCNGGCTTNA AAAAGTTTT ATAAGAGAAG TTCCCTGTAA CACTATTATC 240  
TTCATGGGCA GAGTAGCCAA CCCTTGTGTT AAGTAAAATG TTCTTATTCT TTGCACCTCT 300  
TCCTATTNTN GGTTGTGAA CAGAAGTAAA AATAAATACA AACTNNNNC ATCTCAA 358

SEQ ID NO:1811

LENGTH:358

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02059

SEQUENCE DESCRIPTION:

GATCGTTCT NATCTCNAAG TNCCCTCATTG AGNTCGGTGC ATCTGGCCAN TGAGTCTGCT 60  
GAGACTCTTG ACAGCACCTC CAGCTCTGCT GCTTCAACA ACAGTGACTT GCTCTCCAAT 120  
GGTATCCAGT GATTGTTGA AGAGGGAGGTG CTCTGTAGCA GAAACTGAGC TCCGGGTGGC 180  
TGGTTCTCAG TGGTTGTCTC ATGTCTCTT TTCTGTCTTA GGTGGTTCA TTAAATGCAG 240  
CACTTGGTTA GCAGATGTTT AATTTTTTT TTAACAACAT TAACTTGAGG CCTCTTTCTA 300  
CACCTGGAAA TTTACTCTTN GAATAAATAA AAACTCGTT GNCTTTGNCT TCTGCAA 358

00750

2153480

SEQ ID NO:1812

LENGTH:344

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02060

SEQUENCE DESCRIPTION:

GATCTATACT AGATAATCCT AGATGAAATG TTAGAGATGC TATATGATAC AACTGTGGCC 60  
ATGACTGAGG AAAGGAGCTC ACAGCCCAGAG ACTGGGCTGC TCTCCCGGAG GCCAAACCCA 120  
AGAAGGTCTG GCAGNNNTCA GGCTCAGGGA GACTCTGCC TGCTGCAGAC CTCGGTGTGG 180  
ACACACGCTG CATAGAGCTC TCCTTGAAAA CAGAGGGGTC TCAAGACATT CTGCCTACCT 240  
ATTAGCTTTN CTTTATTTT TTAACCTTTT GGGGGGAAAA GTATTTTAA GAAGTTGTC 300  
TTGCAATGTA TTTATAAATA GTAAATAAAG TTTTACCAT TAAA 344

SEQ ID NO:1813

LENGTH:338

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02062

SEQUENCE DESCRIPTION:

GATCCAGTAG TAGAGACATC ATCGGTCCAA AAGACTTTGC ATCTCATTAG TTGTCATAG 60  
TGACTACCAG GAGGTGGCTG GCATCTATAA CGTGTGGAC GTTTTTATGT AAAGAACTGC 120  
CTGTGTTTT TTTTNAACC AAAGACACTG NCCATAGATT GACTTATACT TTTATAAGTC 180  
TAATTGAAAT ACTTGGGGTA CTATGAAAGG NCTGTNCCTT GNNGTGGCTAC GATTAGAAAA 240  
TCAGGNCTAA CAAACTTTTC TTGTCTGGA NGCATATATA TTTGTGATAT AATTNAATA 300  
TGTATAATT TGGTTAATA AATCAAATCT ATGCCAAA 338

SEQ ID NO:1814

LENGTH:336

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02063

SEQUENCE DESCRIPTION:

GATCCATAGA ATGGATACTG GGAGACAATT AGTAGACTTT GCTACAGGTA GCCAATAGCC 60  
CAGCCTGCAG AGTCACGTCA GATATGAAAT CCCAAAGTTC CTCCCTGACTA TTGGCAACAA 120  
CAATCACTAA CTGCTACTAC AAAAAGGTA AACAAAAATG AACTTACACT TTCAAAATAT 180  
CATTCACTGTA TATTAACAA ATACTTCTTG AGTGTCTACC CAGTGCCAGA CAGTGGTCTA 240  
GGTTCTGGGA GGTACAGCAT CGTGGGCCAC ATGGTTAGAA GCTGAGTGT CCTAACAGG 300  
AGGCTGATTT TGCTGCTCTA CTTTGCACGT GTTAAA 336

SEQ ID NO:1815

LENGTH:335

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02064

SEQUENCE DESCRIPTION:

00751

2153480

GATCTGGATG TGGATGATGC GCCTGGAAAC AGTCAGCAGG CAACTCCGAA GACAACGAGA 60  
TAAGCACCTT TCACAAACCTC GGGAACGTTC ATTCCCCGCT GAAGCTCTC ACCAGCATGG 120  
CCATCTCGGT GGTGTGCTTC TTCTTCCTGG TGCACTGACT GCCTGGTGCC CAGCACATGT 180  
GCTGCCCTAC AGCACCCCTGT GGTCTTCCTC GATAAAGGGA ACCACTTTCT TATTTTTTC 240  
TATTTTTTTT TTNTNGTAAN CCGGNANACC TCCTCCAGCC ATGAGGNNNGG GGNNTANCCA 300  
NGTGTNATGT TTNGGAAANN NAAATGGNAT CTTN 335

SEQ ID NO:1816

LENGTH:335

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02065

SEQUENCE DESCRIPTION:

GATCCATGTG TAATATCACA AGAAAATTATG GAAAAATATA ACATAAAATT AAAGTGGACA 60  
AACCAACAAA AGCTTTATTTC AAGAACAGGT GACATAGTTG AATTGTTTG TAAATCTGGA 120  
TATCATCCAA CAAAATCTCA TTCATTTCGA GCAATGTGTC AGAATGGGAA ACTGGTATAT 180  
CCCAGTTGTG AAGAAAAATA GAATCAATGG CATTACTATT AGTAAAATGC ACACCTTTT 240  
CTGAATTTCAC TATTATATTT GTTTCAATT TCATTTTCA AGTACTGTTT TACTCATTTC 300  
TATTCTAAAA TAAAGTTTG TGTTGATTTG TGAAA 335

SEQ ID NO:1817

LENGTH:334

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02066

SEQUENCE DESCRIPTION:

GATCTTGATG CGGGACTTCA GTCCTAGTGG CATTTCGGA GCGTTTCAA GAGGTTACTA 60  
CCGNNACTAC AACAAAGTACA TCAATGTGAA GAAGGGGAGC ATCTCGGGGA TTACCATGGT 120  
GCTGGCATGC TACGTGCTCT TTAGCTACTC CTTTCCCTAC AAGCATCTCA AGCACGANCG 180  
GCTCCGCAA TACCACTGAA GAGGACACAC TCTGCACCCC CCCACCCCAC GACCTTGGCC 240  
CGAGCCCTC CGGNNGGAAC ACAATCTCAA TCGTTGCTGA ATCCTTCAT ATCCTAATAG 300  
GAATTAACCT CCAAATAAAA CATGACTTGG TAAA 334

SEQ ID NO:1818

LENGTH:328

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02067

SEQUENCE DESCRIPTION:

GATCCAAACA TGAAAGCTGG AGCTACAAGT GAAGGCCTTC TGGCAAATT CTTCAACAGT 60  
TTGTTGAGTA AAAAGACTGG CTCTCCAGGA GGCCCTGGTG TGAGTGGTGG TAGCCCTGCA 120  
GGTGGGGCTG GAGGTGGAAG CAGTGGTTA CCACCATCCA CCAAAAAGTC AGGCCAGAAG 180  
CCTGTCTTAG ATGTTCATGC AGAACTAGAC AGAATTACAC GAAAACCAAGT TACAGTTCT 240  
CCCACAAACAC CTACATCTCC TACGGAGGA GAAGCTTCTT GAAGATACCA AATAAAGCCA 300  
TTTATTCTGT TTTCTGGGNT AATGTAAA 328

00752

**2153480**

SEQ ID NO:1819

LENGTH:328

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02068

SEQUENCE DESCRIPTION:

GATCGGGGCT GCTTATGCCT TTCGTTTATC CTTGGGGTTT GAGAGCGCTG TATTGGGAG 60  
AGAGTTAAA AATACATTAG GAGAGAGAAA CCATTAAGAAG TTTCACTGTC AGAGATATTG 120  
TAGGTGCTAA TACTGGATTG CGTCTCANAT TTAATTCTT TNATGGGTCT GTTAGTCATT 180  
CANCAAATCC CATAAGTATG TGTTAATATT TNAATTGTGT AAAACTCATT TGTTACTTAA 240  
CAGCCTGTAA TAGTGTGTCT GCATTTNCAA CCTGTTGCAA TAACTTNCT GAAATATTAA 300  
CACATTAATA AAACTTTCT TAAACAAA 328

SEQ ID NO:1820

LENGTH:328

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02069

SEQUENCE DESCRIPTION:

GATCAGAGAA GAGGCTACTG GGGGAGAATT CAGTGCCCCC TTGCCCCCTCT AGGGNGCAGA 60  
CCTCCACTGC CATTGTCCTG TNAGCCGCCA AANACCCCAC GGGGTGCCCG CATGCCCCG 120  
TCTANNNGCA GCCCAGGGCC CCCACTCCTG GCTCCTNACA CTTGCCCCC CTATGGCCGC 180  
TCTCCAGACC CTCCCTCCTT CTCTCCCCA CATCCGCACC TGCTGTCCC ACTCTGGGGT 240  
TCTCAAGTCC ATGAACAGAT ATTGTTGCAT TTCCACAAT GCTGATTAAA CATAATAAAC 300  
AATCCAGAAA AGCAGTTTG CCCAGAAA 328

SEQ ID NO:1821

LENGTH:319

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02070

SEQUENCE DESCRIPTION:

GATCCAAGG CCAGTCTCAG GAGTTTACCC CTGGGATGGG GGATGCATCT NCACCTGACT 60  
TTGGGGCCAC GTGCCCTGTG GCACCCCCAGC TCACTGGGAG TCTCAGGAGG GATAACCGGA 120  
TTTNTGCTCT TTCCCTGTCT ACTCCCCACAT CACACAGAAA AATGGCATTG CTCTCTGTCT 180  
CTCCCTGGCA TGGAGAGGGC AGACTGTGCA CATTCACTA GGGTCCAAAT ACAGAAGGGC 240  
CCAGGGCCCA GGGGCTTGCA GCTTCGTGAG GGGTCTCTGG CCCAGTTCC AATGAATAAA 300  
GTTCTCTTGA CAGCTCAAA 319

SEQ ID NO:1822

LENGTH:315

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02071

**00753**

**2153480**

**SEQUENCE DESCRIPTION:**

GATCATCAGA TGGTCGAGTA CTCTTGAAT GTCTCTTGC TGTTTACTGT GGCTCTTTA 60  
CAATGGTGAG ACTTATTCT ACCCTCTACT TTCCACTATT ATTNTTTCC CCTATTGGAT 120  
AATACTAGTC TGAGCAGCCC TAATACTAGA TGTACCTAAA CAGAGATACA AGCCAAGTCA 180  
TTGTTCACTG TAGTCATTTC TTAGTATCTG TTTATATTT GTCACACATC AGAATGTATA 240  
TTTATAGAG CATGTGTTG TCTACTNGTT TGTCTACTAT AATATGTCTT TAATAAAGCT 300  
AAAANCATTC TGAAA 315

**SEQ ID NO:1823**

**LENGTH:315**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02072**

**SEQUENCE DESCRIPTION:**

GATCGCTTT TTGCCGCTCA TATTGAATG CATTGGTTT CCTGGACAG CTATTGAC 60  
AAGACTAGGG GGAGGGTAGG GGTTGGCATA GCAGGCAGGG GCTGGGATAG ACATTCAACC 120  
TAGCTNNNT TCATGCTTT AAGGCTTTAT TTTCTAGAA TGCCAAGAAA CCAACTTTCT 180  
TTAACATGA CTCATCTTT CGATTTCTT GTATAGGTCT TCCTCCCACC CCAAATCTAC 240  
ACTTGTAGA AACAGAATAA TTACTTTGC TTACTCCATT ATCAACACTT GGAGATAGAG 300  
ACTTTACACT TCAGN 315

**SEQ ID NO:1824**

**LENGTH:332**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02073**

**SEQUENCE DESCRIPTION:**

GATCGAAAAG GGACCCCTGCT TCCAATTCC CTCTTCCATT CCTCGAGCTA CTCCAGGGCT 60  
TAGAAGAATG CTCTGGTCT GTGGGTCCAG TGTTGTCTGT CATCCATTAA AGTGTTCCTA 120  
CTTCAAGTG ACAATCCTCT CTTGGCCCT GCCATAGGGC AGAGCATGTN TGGCATAGCA 180  
GCCTGACTTT NATGCCCTAA TCTTGAGTTG AGGAAATATA TGCACAGGAG TCAAAGAGAT 240  
GTCTTATAT CTGACTGTAT ATAAATGAAG TTTTTNGTT TTTTNNGTT TCCTTTTGG 300  
TGCAATAAAAG TTTTTTGG CAGAAGGAGA AA 332

**SEQ ID NO:1825**

**LENGTH:311**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02074**

**SEQUENCE DESCRIPTION:**

GATCAAGGCG CGGACGCTAT CTACGACCAC ATCAACGAGG GGAAGCTGTG GAAACACATC 60  
AAGCACAAGT ATGAGAACAA GTAGTTCTT GGAGGCCCC ATCCAGGCCA GAAGGACAG 120  
GTCCACCCAG CAGCTGTTG CCCAGAGCTG GAGCCTCAGC TTGAAGATGA TGCTCAAGGT 180  
ACTCTTCATG GACCACCAATT CGCTGTTGGC AAGAACGGC TTTACTTACA AAACAGACTC 240  
TTTACCTTCT GCTGTGTTG AAGTATGTCTT AGTCAGCATG CTCAGGAAAT AAATGTGAAT 300

**00754**

TGCCCTTGAA A

311

SEQ ID NO:1826

LENGTH:309

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02075

SEQUENCE DESCRIPTION:

GATCTAGTGT TTGGAACGGA CGTTACCTGC TGGTTGTGC ACAACAGTGG AAAAGGATTG 60  
 ATTGACGGGC ATTACAAGGA TTACTTCGTG CCTNAGCTCT ACAGCTTCT CAAACGGCCT 120  
 TAAAGGTTA TAGTTGGGA AATTATATAT TATTATAACAT CTTCCCTG TCACTTTGC 180  
 AGATATTCTT CGGTNCCNAT AATTAAAATG AACCAGATAT CAGGGTGGTT AATTAAAATG 240  
 AACCAAGATAT CAGGGTGGTT TATAAACGCT GTAAACACAC CTNAGAAAAT ANACATTTA 300  
 CANATGAAA

309

SEQ ID NO:1827

LENGTH:301

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02076

SEQUENCE DESCRIPTION:

GATCATGAAT AACTGATTAG TAAGTCTTGC CTATATTTTC CTGATAGCAT ATGACAAATG 60  
 TTTCTAAGGT ACAAGATGA GAACAGATAA AGATTGTGTG GTGTTTGGG TTTGGAGAGA 120  
 AATATTTAA TTTTTAAATG CAGTTACAAA TTATAATGTA TTCATATTTG TACTTTCTGT 180  
 TAAAATGCAT GATTGCAGAA TTGTTTAGAT TTTGTGTTA TTCTTGATGA AAAGCTTTGT 240  
 TTGTTCTTGT TTTTAAGTTT GCACTCAAAT CTTAAGAAAAT AAATCCACCC ATGTTATCAA 300  
 A

301

SEQ ID NO:1828

LENGTH:298

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02077

SEQUENCE DESCRIPTION:

GATCAGTGAA CTCTGGTTT AAGATAATCT GAAACAAGGT CCTTGGGAGT AATAAAATTG 60  
 GTCACATCT GTAAAGCACA TTCTGTTAG GAATCAACTT ATCTCAAATA GTAACCTCGGG 120  
 GCCTAACTAT ATGAGATGGC TGAAAAAATA CCACATCGTC TGTTTCACT AGGTGATGCC 180  
 AAAATATTTT GCTTTATGTA TATTACAGTT CTTTTAAAAA CACTGGAAGA CTCATGTTAA 240  
 ACTCTAATTG TGAAGGCAGA ATCTNTGCTA ATTTTCAGA TTAAAATTCT CTTTGAAA 298

SEQ ID NO:1829

LENGTH:293

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02078

**2153480**

**SEQUENCE DESCRIPTION:**

GATCCCTTAT CCAACATGGT TCTAACCTTC AGTACTAAAG AAGATGCAGT TTCCCTTGCA 60  
GAAAAAAATG GATGGAGCTA TGNCATTGAA GAGAGGAAGG TTCCAAAACC CAAGTCCAAG 120  
TCTTATGGTG CAAACTTTTC TTGGAACAAA AGAACAAAGAG TATCCACAAA ATAGGTTGGC 180  
ACTGACTATA TCTCTGCTTG ACTGTGAATA AAGTCAGCTG TNCAGTATT ATAGTCCATG 240  
TATAATAAAT ACATCTCTTA ATCTCCTAAT AAATTGGACC TTTAAACTAC AAA 293

**SEQ ID NO:1830**

**LENGTH:291**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02079**

**SEQUENCE DESCRIPTION:**

GATCANNATT TGAAAAGGNT TTCTAGAAAT TNGGGGTAAG AAGTACTACC AAAATGTAAC 60  
TNCTAATCAA GGGTGATGCA CAGCAAAAGC AATGGACCCC ATCCCTCTAA AGCCTGCCCT 120  
CCTTGGCTT CAACTGTATA TGCTGGGTAT TTCATTTGTN TTTTTATTT GGAGAAAGCG 180  
NTTTTAACTG CAACTTTCTA TAATGCCAAA NTGACACATC TGTGCAATAG AATGATGTCT 240  
GCTCTAGGGA AACCTCAAA NGCANTAAAAA ATGCTGTNTT GAAATGCCAA A 291

**SEQ ID NO:1831**

**LENGTH:288**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02080**

**SEQUENCE DESCRIPTION:**

GATCTGGGCC TGAATAAGGG TTATCGAATG GTGGTGAATG AAGGTTCAGA TGGTGGACAG 60  
TCTGTCTATC ACGTTCATCT CCATGTTCTN GGAGGTCGGC AAATGCATTG GCCTCCTGGT 120  
TAAGCACGTT TTGGGGATAA TTTCTCTTC TTTAGGCAAT GATTAAGTTA GGCAATTTC 180  
AGTATGTAA GTAACACACT TATTTTGCC TGTNTATGGA GAGATTCAAG AAATAATTT 240  
AAAACCGCAT ACATAATAAA AGACATTGTT GCATGGCTTA TAGTCAAA 288

**SEQ ID NO:1832**

**LENGTH:288**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02081**

**SEQUENCE DESCRIPTION:**

GATCCAGCCT TAATNNTTT CTGACATCCT AGTAATAGCA GACCCTGCAC AAAGTGGATA 60  
TCAGACTTAA TACTGTNAGG AGACAAAATA ATGAGAATAG TTTTACCAAA GATAATNAAA 120  
TCTCGCATCA TGTCTGCATT TTACCATAGA TTGGAGTGCA TCCTTAGGAA ACTGAATGTA 180  
ACAAAAACCC AGGACATTAA TGGAAATTGT ATGCTCTCTA GCAACTTGT GTGAATTTT 240  
ATACAAACAC TGTTCTATGA GTTATATAAA ATGTTATAAA ACTAGAAA 288

**SEQ ID NO:1833**

**LENGTH:285**

**00756**

**2153480**

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02082

SEQUENCE DESCRIPTION:

GATCCTGAGA ACTTCAGGCT CCTGGGCAAC GTGCTGGTCT GTGTGCTGGC CNNNCAC TTT 60  
GGCAAAGAAT TCACCCACC AGTGCAGGCT GCCTATNAGA AAGTGGTGGC TGGTGTGGCT 120  
AATGCCCTGG CCCACAAGTA TCACTAAGCT CGCTTTCTG CTGTCCAATT TCTATTAAG 180  
GTTCCCTTGT TCCCTAACGTC CAACTACTAA ACTGGGGGAT ATTATGAAGG GCCTTGAGCA 240  
TCTGGATTCT GCCTAATAAA AAACATTTAT TTTCATTGCA AGAAA 285

SEQ ID NO:1834

LENGTH:282

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02084

SEQUENCE DESCRIPTION:

GATCTCATGG GCTTCCCTG GAGGAAAGGT TTTTTTGTT GTTTTTTTT NAAGAACTTG 60  
AAACTTGTAA ACAAGAGATG TCTGTAGCTT TTTTNCCCAT CTGTAGTGTGTA TGTNAAGATT 120  
NCAAAACCTG AGAGCACTTT TCCCTTGTGTT AGAATTATGAGA GAAAGGCACT AGATGACTTN 180  
AGGATTTNCA TTTTNCCCTT TATTGCCTCA TTTCTTGTGA CGCCTTGTG 240  
TCTGTTTATT TTTNCTACA AATAAAAAGC TAAGATTCTA AA 282

SEQ ID NO:1835

LENGTH:279

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02085

SEQUENCE DESCRIPTION:

GATCTTAAGC TTTGATAAGA GCTGTGCTGT GGCTGAGTAT GGTGTGTATG TGAAGGTGAC 60  
TTCCATCCAG GACTGGGTTC AGAAGACCAT AGCTGAGAAC TAATGCAAGG CTGGCCGGAA 120  
GCCCTTGCT GAAAGCAAGN CTTCAGCCTG GAAGAGGGCA AAGTGGACGG GAGTGGACAG 180  
GAGTNGATGC GATAAGATNN GTTTGAAGC TGATGGGTGC CAGCCCTGCA TTGCTGAGTC 240  
AATCAATAAA GAGCTTCTT TTGACCCAAA AAAANTAAA 279

SEQ ID NO:1836

LENGTH:275

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02086

SEQUENCE DESCRIPTION:

GATCCATAGT CCTACCTGCA CCTCTGGATT CTGGATTACAG ACACCAAGTC CAAGCCCGTT 60  
CTTACGTCGC CATAAAGGCC CCCGAACGGC ATTCTCGGTA CTTCTGTTG TTTTTGTACA 120  
TTTNATTAGA AAGGACTGTA AAATAGCCAC TTAGACACTT TACCTCTTCA GTATGCAAAT 180  
GTAAATAAT TGTAATATAG GAAATCTTT GTTTAATAT AAGAATGAGC CTGTCCAATT 240  
TCTGCTGTAC ATTATAAAAA GTTTTATTC ACAAA 275

**00757**

**2153480**

SEQ ID NO:1837

LENGTH:269

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02087

SEQUENCE DESCRIPTION:

GATCCGAAGA GGAACCTCTG GTCATCTTA ACAAGAAAAT CAGCAAGAAC CCTACCTTA 60  
AGTTATTAAA GGACAAAGTC AAGCTTGTGA AATGAACATT TGTGTATTTA AAANTTGAAT 120  
CCATTCTGCT GACTTCTTAC TTTCACTGCT GTTTATAAAA TGTGTAATGA ATTCTAACAA 180  
CTCAAATTT GCTTTTGAC GCNGTATTT TANGTTANGN AAATATATTT NTGGTATAAC 240  
TTTTATGCNA NAAATAAAAAT ATATTCTGN 269

SEQ ID NO:1838

LENGTH:268

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02088

SEQUENCE DESCRIPTION:

GATCTCATTG TTTATTAACC TGTATTCTGT TTACATGTCT TTAAAACAGT GGTTCTTAAA 60  
TTGTAAGCTC AGGTTCAAAG TGTGGTAAT GCCTGATTCA CAACTTGAG AAGTAGCAC 120  
TGGAGAGAAT TGGATGGGT GGCGGTATT GGTGATACTT CTTGAAATGT AGATTCCAA 180  
TCACATCTT AGTGTCTGAA TATATCCAAA TGTTTAGGA TGTATGTTAC TTCTTAGAGA 240  
GAAATAAACG ATTTTGGGA AGAATAAA 268

SEQ ID NO:1839

LENGTH:265

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02089

SEQUENCE DESCRIPTION:

GATCTATCTA AATATATTAA GTAAAATTAC ACCATTCACT TGTTGGAAA ATAATCTTG 60  
GTTTGGAAAGA TATTAACATA ATGGGCATCT TAGAATCATA AATCACATGA AATGAGAGAC 120  
AATGCAATAT TGTATAATTCTGATG CAATTGTTT AATTGANTTT TCAAGTGCCA 180  
TTATAAAAGTT TTAAAAATTCAATATGAG TTGGTGCCTA ATTTTNNTT TCCTAAAAAT 240  
AAAATTTTC CTTTTATGA GTAAA 265

SEQ ID NO:1840

LENGTH:261

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02090

SEQUENCE DESCRIPTION:

GATCATAAAA CCTTCATTCC ATAGGTACCC TTTATCCTCA CAGATACAGA GACACCAAGA 60  
AGAATCTGGA CAAATAGGAC TTGCTAAGTT CTCCACAGTT TATTACCATT AGATTATGTC 120

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CTTTTGTNCT CTGATTATAAC TTCTGCATAA GACTGTACAT AAAANTACAC AAGTTTCCT 180  
ATTTNTTTT TGTCTTCATT TCTGAAGATT CCTGTATGT AAAACTTACA GTAAATAAT 240  
GTGTGTGCTT TTNTCAATAA A 261

SEQ ID NO:1841

LENGTH:263

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02091

SEQUENCE DESCRIPTION:

GATCAGGTTA GGGCGAGGCC TACCTCTCCA GCCTCAGCTC TCAGTTGCAG CCCTGCTNAT 60  
GCCTGCTTGG ACTTGGCCCG TGCCACCTCC NGCCTCAGGT GTCCGCTATC CACCAAAAGG 120  
GCTCCCTGAG GGTCTGGCA AGGGACCTGC TTCTATTAGC CCTTCTCCAT GGCCCTGCCA 180  
TGCTCTCCAA ACCACTTTT GCAGCTTTT CTAGTTCAAG TTCACCAGAC TCTATAAATA 240  
AAACCNGACA GACCATGAAC AAA 263

SEQ ID NO:1842

LENGTH:264

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02092

SEQUENCE DESCRIPTION:

GATCAGAAAG AAACCTTTG TAGCAATATC AAGAATCTAG TTTCATCTGA GAACTTCTGA 60  
TTAGCTCTCA GTCTTCAGCT CTATTTATCT TAGGAGTTA ATTTGCCCTT CTCTCCCCAT 120  
CTTCCCTCAG TTCCCATAAA ACCTTCATTA CACATAAAGA TACACGTGGG GGTCAGTGAA 180  
TCTGCTTNAN NATCCTGAAA GTTTCTGGGG CTTAAGATTTC CAGACTCTGA TTCATTAAAC 240  
TATAGTCACC CGTGTCTGT GAAA 264

SEQ ID NO:1843

LENGTH:246

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02093

SEQUENCE DESCRIPTION:

GATCAAATGT CACACAGCAG TTCCCTTGCA ACACCTTCAG CTCCCCATGC TCCAGAATAC 60  
CCACCCAAGA AAATAATAGG CTTTAAACA ATATCGGCTC CTCATCCAAA GAACAACTGC 120  
TGATTGAAAC ACCTCATTAG CTGAGTGTAG AGAAAGTGCAT CTTATGAAAC AGTCTTAGCA 180  
GTGGTAGGTT GGGAGGAGA TAGCTGCAAC CAAAAAAGAA ATANATATTCA TATAAACCTT 240  
CAGAAA 246

SEQ ID NO:1844

LENGTH:243

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02094

**00759**

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SEQUENCE DESCRIPTION:

GATCTGTGTG CATGNTGTG TTTGTGTATA TATACATATC TAGGGCTAGT ACTTAGTTTC 60  
ACACCCGGGA GCTGGGAGAA AAAACCTGTA CAGTTGTCTT TCTCTNATTN TNAATAAAAT 120  
AGAAAAAATCG CGCACTTGCG GTCCCCCCCC CACCCCTTT TTTAAACAAG TGTTACTNNN 180  
NCCGGGAAAA TTTNCTGTC TTTGTAATT TAAAACTTA AAATAAATTG GAAAAGGGAG 240  
AAA

243

SEQ ID NO:1845

LENGTH:240

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02095

SEQUENCE DESCRIPTION:

GATCTAGTGA ACATTCGACC TCCATTACGG AGAGTTTCCCT ATGTTTCACT GTGCAAATAT 60  
ATCTGCTATT CTCCATACTC TGTAACAGTT GCATTGACTG TCACATAATG CTCATACTTA 120  
TCTAATGTTG AGTTATTAAT ATGTTATTAT TAAATAGAGA AATATGATT GTGTATTATA 180  
ATTCAAAGGC ATTTCTTTTC TGCATGTTCT AAATAAAAAG CATTATTATT TGCTGAGAAA 240

SEQ ID NO:1846

LENGTH:239

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02096

SEQUENCE DESCRIPTION:

GATCTAACCA GCGTCCCCAC AGCCCCCTCT AGATTCTTGG AGTTCCGCAG AGCTTACTAT 60  
ACCGCGGTCTG TCCTAATCTT TGTGGTGTTC GCTATCTCTT GTGTCAAATC TGGTGAACGC 120  
TACGCTTACA TATATTGTCT TTGTGCTGCT GTNTGACAAA CGCAATGCAA AAACAATCCT 180  
CTTTCTCTCT CTTAATGCAT GATACAGAAT ATAATAAGA NTTCATCTT TAAATGAAA 239

SEQ ID NO:1847

LENGTH:231

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02097

SEQUENCE DESCRIPTION:

GATCCATCCT CTCTCTTAGC TGAGTAAATC CGGGTCTCTA GGATGCCAGA GCAGCGCACA 60  
CAAGCTGGGA AATCCTCAGG GCTCCTACCA GCAGGACTGC CTCGCTGCC CACCTCCGC 120  
TCCTTGGCCT GTCCCCAGAT TCCTCCCTG GTTGACTTGA CTCATGCTG TTTCACTTTC 180  
ACATGGAATT TCCCAGTTAT GAAATTAATA AAAATCAATG GTTTCCACAA A 231

SEQ ID NO:1848

LENGTH:231

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02098

00760

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**SEQUENCE DESCRIPTION:**

GATCCAAAAT GCTGACAGGT TCAAACAAAA TTGGAATTGA AAATCAGAGT GCGTTCAAGA 60  
GTATCAAACA ATACTATCTT GTTACTTGCT TATTACCTTA GTAGACTGGA AGCAACACTT 120  
CACACAAAAA AAGGGTTTGG ATGTAATTTC GGATAAGAAG AGATGTTTCT GTAAAGTCTT 180  
TCCTGAGANG CATATTATTT GAGAAAAACA CATATTCTG TTTTAGTAA A 231

**SEQ ID NO:1849**

**LENGTH:228**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02099**

**SEQUENCE DESCRIPTION:**

GATCTACCAT GTAAAATGTT GTAGAGATAG AGCCATATAA CGTCACGTTT CAAAACTAGC 60  
TCTACAGTT TGCTTCTCCT ATTAGCCATA TGATAATTGG GCTATGTAGT ATCAATATTT 120  
ACTTTAATCA CAAAGGATGG TTCTTGAAA TAATTGTAT TGATTGAGGC CTATGAACTG 180  
ACCTGAATTG GAAAGGATGT GATTAATATA AATAATAGCA GATATAAA 228

**SEQ ID NO:1850**

**LENGTH:236**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02100**

**SEQUENCE DESCRIPTION:**

GATCTACCGG CCCCCGCTGGG GTGCCCTGGG GGACTACCTC TCCTTCACCA TACCCCTGGG 60  
CACCCCTGGA CAACTCTGC ACATACTGGG GCCCTGCTTA TTNTCCAGG ACAGGCTCCT 120  
TAAAGCAGAG GAGCCNGTNC TGGGAGCCCC TTCTCAAACCT CCTAAGACTT GTTTCATGT 180  
CCCACGTTCT CTGCTGACAT CCCCCAATAA AGGACCCTAA CTTTNGNNN TNNAAA 236

**SEQ ID NO:1851**

**LENGTH:227**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02101**

**SEQUENCE DESCRIPTION:**

GATCTATGGT TTCTGCCTAC CCAGGGATAGT CTTGTCTCTA GACAATGTAT TGATGATGCA 60  
AATGTTCTGG AACTAAATAG TGGTGATGGT GGCACAAACAC TGTGAATGTA CTAATGTCA 120  
CTGATTGTA CGTATTTAAT ATGAATTAAA TGTTAAAATG GTGAATTATA TTTATGTATA 180  
TTTNACCATA ATAAAATAT GCATTGGAAG ATGCATTTT TGTGAAA 227

**SEQ ID NO:1852**

**LENGTH:229**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02102**

**SEQUENCE DESCRIPTION:**

**00761**

2153480

GATCTTGGA CCAGTTCTA GCAAAGTTGT GTTGAAAGA TACTCTATTA AAGAAGACTG 60  
TGGAACATTT TTATCGGTGC CCATTATATC CTTAAGTTG GATATTAGC TGACCTTCGC 120  
TTAACATAG GTCTAATTTA TTGCCGTGT CATTTCAT ACAAACTAGT TGATTTAAA 180  
AAGTTCATTT CTCATACTGT GCATTAAT AAAAATTG A CAATTTAA 229

SEQ ID NO:1853

LENGTH:224

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02103

SEQUENCE DESCRIPTION:

GATCTCCTGT TTTTCAGG CTCCCTAAAGT AACATCAGCC ATNTTNAGA TTGGTTCTGT 60  
TTTCGTACCT TCCCCTGGC CTCAGTGAG CCAAGAAACA CTGCCTGCC TCTGTCTGTC 120  
TTCTCCTAAT TCTGCAGGTG GAGGTTGCTA GTCTAGTTTC CTTTTGAGA TACTATTTTC 180  
ATTTTGTGA GCCTCTTGT AATAAAATGG TACATTTCTA TAAA 224

SEQ ID NO:1854

LENGTH:223

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02104

SEQUENCE DESCRIPTION:

GATCAAGGCC GGACCCCCACT GCCCCACTGC CCAACTGATA GCCACGCTGA NNGAATGGAA 60  
GGAAAATTTG CTTGGACCTG CAAGCCCCGC TGTACAAGAA ATAATTAAG AAACTTTG 120  
AGAGTTAGCT ACTAGCTGCC TACGTGTGTN CATTGCTAT ATAGCATACT TCTTTTTCC 180  
AGTTCAATC TAACGTGAA AGAACTTCTG ATATTTGTG TTN 223

SEQ ID NO:1855

LENGTH:227

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02105

SEQUENCE DESCRIPTION:

GATCCTAGTA ATTGCCTAGA AATATCTTC TCTTACCTGT TATTTATCAA TTTTCCAG 60  
TATTTTATA CGGAAAAAAAT TGTTGAAA ACACCTAGTA TGCACTTGAT AAGAGGAATT 120  
TGGTATAATT ATGGTGGGTG ATTATTTTT ATACTGTATG TGCCAAAGCT TTACTACTGT 180  
GGAAAGACAA CTGTTTAAT AAAAGATTAA CATTCCAAAA AAACAAA 227

SEQ ID NO:1856

LENGTH:219

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02106

SEQUENCE DESCRIPTION:

GATCTATACA AAGTCTTGAA GAGGTGTTAA ATATGGTTAT TTATGCACTG TGGGATGTGT 60

00762

TCTTCTTCCT CTGTATTCCG ATACAAAGTG TTGTATCAA GTGTGATATA CAANGTGTAC 120  
 CAACATAAGT GTTGGTAGCA CNTAAGACTT ATACTTGCT TCTGATAGTA TTCCCTTATA 180  
 CACAGTGGAT TGATTATAAA TAAATAGATG TGTCTAAA 219

SEQ ID NO:1857

LENGTH:219

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02107

SEQUENCE DESCRIPTION:

GATCAAGAAA GACAAAAAGC CAGCCTGCAG CAAGCCTTT GGAGAGCAAA TCTGNAAAGA 60  
 GAGTAACCGC GAGTGTCAAG AGGTGTGCAG AAAATCCAAA GAAGGCTGAG GACAATGTGT 120  
 GTGTCAAGAA AATAAGAACC AGAAGTCATA GGGACAGTGA AGATATTGA CAGAAAAATC 180  
 GAACTGGGAA AAATATAATA AAGTTAGTTT TGTGATAAA 219

SEQ ID NO:1858

LENGTH:219

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02108

SEQUENCE DESCRIPTION:

GATCTGTCGG AACAGGACA CAAAAGCAGC AAGAACGGG GAGAGAGAGG GATAGAAAAC 60  
 AAGCGCAGGA GAGCCTGCGA ACACAAANT GAATGAGGGC TTTTGTGGC TGGGATGGG 120  
 TTTTGGTTTT GGGTTTTTT TTTTNAATT GTTTGACTT CGTACAGGGT ACTTTTCCC 180  
 AACCTCATCT NTCAGAAATC CATGTGGNT TCCTGGAAA 219

SEQ ID NO:1859

LENGTH:217

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02110

SEQUENCE DESCRIPTION:

GATCTGAAGA AATTACAAA CATTAAAATG AGANAAATTG GCGCTAATGA TGCAATTCCC 60  
 AAGACGTGCA AGAGGAAAC TATTATAACT GTAGACCAAG ATTGGGGGA ATTGGAACTA 120  
 AACGATGAAT CAAGTGTGATTC AGATGAGGAA ATGACTGCAG TGGCTAATT GTCTTCACCT 180  
 GAATTGAAAA TAAATAATTG GAGAGCTTCA AATTAAA 217

SEQ ID NO:1860

LENGTH:216

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02111

SEQUENCE DESCRIPTION:

GATCCATTTC TTTAAAATAC TGACATATAG AGTTGTACCT TATATAGAAT ATAGTTGTAT 60  
 CTTGAAGTCA ACATATTAAA TTATTCTCAA AATTATGTAT TTNCAGATTG TACTTGTAAG 120

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TTTCAAAGAA AAATTACCGT CTTTCATAT TGACCTGGAA ACTAAATAGG ATGTGATTCA 180  
GCTACATTAAC TTTCTAATA CAATCTAGGA AAGAAA 216

SEQ ID NO:1861

LENGTH:213

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02112

SEQUENCE DESCRIPTION:

GATCCTTTTC TTGAAAGAAC AACAGAAAAAT GTGTCACTCCA TTTTCAGAA TATAACCACT 60  
CAAGCTACTG GCACATAGTG AAAGATTACT TCTGACATTG CATTNCTCTT CTTTGAAAAA 120  
TTAGTATNGT AATTAATAGT ACCTTTGAA AATTAATAGA ATTATTTAAA TTACAGTATA 180  
TGTNGCAAAA TATATCACTT TTGATACAAT AAA 213

SEQ ID NO:1862

LENGTH:210

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02113

SEQUENCE DESCRIPTION:

GATCTATCTC ATCAAACAAAC ACAATGAAGA TATTTTAGAG TACAAAAGAA GAAATGGGCT 60  
GGAATAAACT TTTGAAACAC TAATGTAGTA TGCTCCGTAT AGTGATTGTA GCTGTTCCCTC 120  
TGGATTCAACC ATCTGTTGAG TTGTAATGT GNGANAAAAA GTTATATGTG AATATATATC 180  
AAGCCAGCAT TTGTATTTG CATCATTAAA 210

SEQ ID NO:1863

LENGTH:209

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02115

SEQUENCE DESCRIPTION:

GATCGGGGCT GCCAGAGGGN TAGAAGCGAG GGCACCAAGCA GTTGTGGGTG GGGAGCAANG 60  
GAAGAGAGAA ACTCTTCAGC GAATCCTTCT AGTACTAGTG GAGAGTTGTA CTGTGAATTA 120  
ATTTTATGCC ATAAAAGACC AACCCAGTTC TGTTNNNNNC TGTAGCATCT TGAAAAGAAA 180  
AATTATAATA AAGCCCCAAA ATTAAGAAA 209

SEQ ID NO:1864

LENGTH:208

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02116

SEQUENCE DESCRIPTION:

GATCTGGAGC AACAGCTAGG AAATATCATT AATTCTGCTC TTCAGAGATG TTAAAAATAA 60  
ATTACACGTG GGAGCTTCC AAAGAAATGG AAATTGATGG GAAATTATTT GTCAAGCAAA 120  
TGTTAAAT CCAAATGAGA ACTAAATAAA GTGTTGAACA TCAACTGGGG AATTGAAGCC 180

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AATAAACCTT CCTTCTTAAC CATTCAAA

208

SEQ ID NO:1865

LENGTH:201

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02117

SEQUENCE DESCRIPTION:

GATCTATACT TAGAATGCAA TGTNGACAGA GGGCAGTTAA AATATCCAAG ATGTATTCCA 60  
AGACAAAGCA AACAAACAAC TGGAAGTGGT AATCAATTCA ACAGGCCTTC TGAATTNTCT 120  
GAAGCNAAG CAACGTTTGC CATNNGATAT TTGTGACACT TTGGCAAATG GAAAAATAAA 180  
CCAATTATA CGTGCAATAA A 201

SEQ ID NO:1866

LENGTH:200

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02118

SEQUENCE DESCRIPTION:

GATCATGAAG GTATCCACAC TTCCCCTTGC ATTTCTTCT TAACCTCTG TTACACGTCA 60  
TTGAAACTAC ACTTTTTGG TCTGTTTTG TGCTAGACTG TAAGTCCCTT GGGGGCAGGG 120  
CCTTGTCTG TCTCATCTCT GTATTCCCAA ATGCCCTAACA GTACAGAGCC ATGACTCAAT 180  
AAATACATGT TAAATGGAAA 200

SEQ ID NO:1867

LENGTH:202

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02119

SEQUENCE DESCRIPTION:

GATCACATTT TGAAATGCCTT AAAAGACTTT ATTGTTCTAA TTATCCAGAT GTACCTTTGT 60  
AAAATAGCTC TTTTATGAAT TAGCTGATAA GGCTGTATGT TTCTGGAACA AAATATTGGT 120  
CATCTAAAAN CTTCTGTCTT NCTGGGGTCT GGGAAAATAG AAAATAAGAT TTCAAATATT 180  
AAATAAGCTT AANGGCACCA AA 202

SEQ ID NO:1868

LENGTH:200

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02120

SEQUENCE DESCRIPTION:

GATCAGGCC TTCTTCCCAC AGCAATAGTC CCCAATACGT AGATTTTGC TCTTCTGTAT 60  
GTGACAACAT TTTTGACAT TATGTTATTG GAATTTNCTT TCATACATTA TATTCCTCTA 120  
AAACTCTCAA GCAGACGTGA GTGTGACTTT TTGAAAAAAG TATAGGATAA ATTACATTAA 180  
AATAGCACAT GATTTCAAA 200

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SEQ ID NO:1869

LENGTH:194

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02121

SEQUENCE DESCRIPTION:

GATCTNTNTG TTCATTGTAT TCTTTTNTC TCAAGAGTC CATTAAATGG AAATAAAAACG 60  
GTATAATTAA TAATTGTCTA GGGGGGAAAA ATGAAGCAAA TNTCATTGGA TATTTTTAAA 120  
GGTCTCCACA GAGTTTATGC CATATTGGAA TTTTGTGTA TAATTGTCAA ATAAATATTT 180  
TGGTGANGCA TAAA 194

SEQ ID NO:1870

LENGTH:190

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02122

SEQUENCE DESCRIPTION:

GATCCAATAC TATTTAGTTT ATTATTGAAA TTGGAAGGAT TCATTGAGCA GCATAGAAGT 60  
TTGTTTACAT GTTACTTTGA GATGCTAGGT ATTTGTGGAA TTAAAAAGAA TCAGGCTCTT 120  
TTGTACTNAN TTTTAAATC TGTGATGCTT NTCAAATTAA ATTCTATAA AATTGATGCA 180  
ATTTCATAAA 190

SEQ ID NO:1871

LENGTH:188

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02123

SEQUENCE DESCRIPTION:

GATCGAACAG TTTTGAAGCT ACTGTGTGTG TGAATGAACA CTCTTGCTTT ATTCCAGAAT 60  
GCTGTACATC TATTTGGAT TGATATTGT GTTTGTGTAT TTACGCTTTG ATTCAANNAGT 120  
AACTTCTTAT GGAATTNATT TGCATTGAAC ACAAACTGTA AATAAAAAGA AATGGCTGAA 180  
AGAGCAAA 188

SEQ ID NO:1872

LENGTH:184

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02124

SEQUENCE DESCRIPTION:

GATCCTATTT ATTTGTTAG GCCATCTTAA ATTTCTTCA GCAGTGTGTT GTAGTTCCA 60  
TTAGAGATTT TCCATGTCNT TTGTTAAGTT TATTCCTAGG TATTTTATTT TTTATGGTAT 120  
TNTATTATAA TCCTNNNGATG TCTATTATAT AGAAATATAA TTNATTTNG TTATTGACTG 180  
NNNN 184

**00766**

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SEQ ID NO:1873

LENGTH:181

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02126

SEQUENCE DESCRIPTION:

GATCCAAGTN CTGACTTTTC CCCCTGACAG CTGTGTGACC TTCGTGAAGT CGCCAAACCT 60  
CAAATGAGCC CCAGTCATTG CTAGTAAGAC CTGCCTTGGA GTTGGTATGA TGTTCAAGTT 120

AGATAACAAA ATGTTTATAC CCATTAGAAC AGAGAATAAAA TAGAACTACA TTTCTTGCAA 180

A

181

SEQ ID NO:1874

LENGTH:181

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02127

SEQUENCE DESCRIPTION:

GATCTTAAAT TTTCTCATCT CAAAAAAATA TGTAAGTGA TAGATATGTT AAATAGCTNN 60  
TATGTATTTG GCAATGTGTA GTGTATATAT ATAAACATCA CACAGTACAC CATAAAATATA 120

TTTAATTCTT GTCAATTACT CTTAAACCT TAATAAAGTT GATAAAACAT TCTTTTTAA 180

A

181

SEQ ID NO:1875

LENGTH:179

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02128

SEQUENCE DESCRIPTION:

GATCAGGTAA GCAAATGATG TAAAAGAAGC TTTATTGTCT AGTTGTTTT TTTCCCCAA 60  
GACAAAGGCA AGTTCCCTA AGTTTGAGTT GATAGTTATT AAAAAGAAAA CAAAACAAAA 120

AAAAGGCAAG GCACAAACAAA AAAATATCCT GGGCAATAAAA AAAANTATT TAAACCAAA 179

SEQ ID NO:1876

LENGTH:178

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02129

SEQUENCE DESCRIPTION:

GATCCGGGAG CACACCGTT CCTGATTGCT CAGGGACTCA TCTTCCCTC CTTGGTGATT 60  
CCGCAGTGAG AGAGTGGCTG GGGCATGGAA GGCAAGATTG TGTCCTCATTC CCCCAGTGCG 120

GCCAGCTCCG CGCCAGGATG GCGANGGAAC TCAATAAAGT GCTTGAAAA TGCTGAAA 178

SEQ ID NO:1877

LENGTH:175

TYPE:nucleic acid

00767

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TOPOLOGY: linear

CLONE:HUMGS02130

SEQUENCE DESCRIPTION:

GATCATTCTC CGAAAGCAAC TCCTGACAAT TAAGCATT TTTCTCCAAA TACAAAGTAT 60  
ATTCTCTTA TTGGAAAATA AATTAATAAA TATATTCTGT ATTTNNCTC TCCGTGAAAA 120  
ACAAAAGAGC CTCTGACATT ACTGTCTCTC AGTGTGGTT CAGATTGAGG CTTN 175

SEQ ID NO:1878

LENGTH:172

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS02131

SEQUENCE DESCRIPTION:

GATCAATCCT TCTTATGTT GCTTTAATGT GTATTGAAGA AAAGCACTT TAAAAAAGTA 60  
CTCTTTAAGA GTGAAATAAT TAAAAACCAC TGAACATTG CTTTGTTC TAAAGTTGTT 120  
CACATATATG TAATTAGCA GTCCAAAGAA CAAGAAATTG TTTCTTTCA AA 172.

SEQ ID NO:1879

LENGTH:170

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS02132

SEQUENCE DESCRIPTION:

GATCTGATTG TTTAAAAGTA CACAGCACCT CCCTCCCCAC TCTCTCTGC TCCTGCTTC 60  
ATCAAGTGAA AACTCCCTGA GGCCCTCTCA GAAGCTGAGT AGAGGCCAGC ACTATGCTTC 120  
CTGTACAGCC TGTGGAACCA TGAGGCAATT AAACCTCTT TCTTTATAAA 170

SEQ ID NO:1880

LENGTH:168

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS02133

SEQUENCE DESCRIPTION:

GATCAGAAAA ATTCACTTT TTTAACCTG CCCTAATTT TCTTGAGGAA TTAAATAGAG 60  
CAAACATTT TCAGGTTATG CTTACAATAA AATATACTTA AGAAAATGAC TGAAGATGTA 120  
TGTTTTGAA TGTTTGATT AAATAATGT ACACATTTAG AACACAAA 168

SEQ ID NO:1881

LENGTH:168

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS02134

SEQUENCE DESCRIPTION:

GATCAGCCTC CCTGTAAGCC AGTTATCAGT ATCCAAGTGC TTTAACACAG GCTTCTCAGA 60  
AGAAATCATT TTTATTCCTA CCATTATTTC ATACCAAAGC ATCATTATGT GCTACAGTTC 120

00768

**2153480**

CAATTCTTA CACAAGAATG AAAAGGGTTA CCAATGCAGC AAGTTAAA

168

SEQ ID NO:1882

LENGTH:167

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02135

SEQUENCE DESCRIPTION:

GATCTTACTG TAAGTTGAAG GGAGTTTG CCTAACTCAT GGATTGTGCA AGAATGAAC 60  
GCTGTTGGGT TTGACTGACT GTGCATGGAT TGTGGTGTGG TGTATCTNAA GGCTATTGAA 120  
TGCAACTTAC AATGCTTAGG TAAAAATCTT TATNCTTTA GTATAAA 167

SEQ ID NO:1883

LENGTH:165

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02136

SEQUENCE DESCRIPTION:

GATCCTTGAT GAGCCAACAT TGCACGTGTTG ATACATATCT ATGTTTACGC GCTATTAGAA 60  
CAGAAGGGCGC TGTATATAGA AATGTTGCTT TGAAGCAATA TTTGCAAAAC ACNCAGACTN 120  
CAGNATCTGT ATTTGGAAAA AATAAAACAG GTTCTTGTG CTAAA 165

SEQ ID NO:1884

LENGTH:168

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02137

SEQUENCE DESCRIPTION:

GATCTGACCT CCACGGAGCC GCTGTCCCCG NCCCCCTTCG TTCCCGTCTG TCTGTCCTGT 60  
CTGATTCTNT TAGGTGTCAT GTTCTTTTT CTGTCTTGTG TTCAACTTTT TTTAAACTA 120  
GATTGCTTG AAAACATGAC TCAATAAAAG TTTCCTGNCC AATTAAA 168

SEQ ID NO:1885

LENGTH:163

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02138

SEQUENCE DESCRIPTION:

GATCACGATG GCTTCACAAG CCAGCTGTTG GGTTTGCTAT GTCACGTGTTG CTCAGTCACA 60  
TCCCTGCGTG TATACTGTCT GCGGGGCACA TATGTATCCA TTTAGAGCTA AAGGAATCAG 120  
TGTACACTAC AGCTAACCTT AATAAAATCCG ATGTTTCGG AAA 163

SEQ ID NO:1886

LENGTH:159

TYPE:nucleic acid

**00769**

TOPOLOGY: linear

CLONE: HUMGS02139

SEQUENCE DESCRIPTION:

GATCTAGCAG CATGCAAACA CATCACCTAA ACTACAAAAG AAAGGTCTC ACTGTCTCTA 60  
 AAAAATAAAC TCATTAACCT TGAGTTATT GCAGACAGCC AAATCACCCA GGGCAACTTT 120  
 AAAGAGTCAG AAAATAAAC TTTCCCGTTG TATGACAAA 159

SEQ ID NO: 1887

LENGTH: 154

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS02140

SEQUENCE DESCRIPTION:

GATCATGGAG GAAAAAGGTA CTGGATAAAA GTAAACTTCA AACCTTAGGG CGGGANACTA 60  
 AAACCAAAAT ACATGTATTA TTATAGAAA ATATTTCTG TTTAATCTT TTCTNTTTAA 120  
 ACAAGGACTC ATACTAAAAA AAATGTTTAG CAAA 154

SEQ ID NO: 1888

LENGTH: 151

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS02141

SEQUENCE DESCRIPTION:

GATCTCTGAT GACCTAACCT AAGCAAAACC ACTGAGCTTC TGGGAAGACA ACTAGGATAC 60  
 TTTCTACTTT TTCTAGCTAC AATATCTTCA TACAATGACA AGTATGATGA TTTGCTATCA 120  
 AAATAAATTG AAATATAATG CAAACCATAA A 151

SEQ ID NO: 1889

LENGTH: 150

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS02142

SEQUENCE DESCRIPTION:

GATCTATATT CTTCTTAATT TTATGGCTA TATTTAATGT TTTCCATCAT TGTGCCTTA 60  
 AAAAGTATAT GTACATGTAT GCATAAAATT ATGTGAAGTT ATATATANGN NTCCGTTATT 120  
 CCAGATTAAGA GTTATCTT AGTAATCAA 150

SEQ ID NO: 1890

LENGTH: 149

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS02143

SEQUENCE DESCRIPTION:

GATCAAAAAT ATGTGACCTT AATGAGATTT TTATGATTC TAAAGTAACA ATAAAAGCAG 60  
 TTTTAGAGT TGAGTTCCAG AGAGGGCAGG GCAATGGCAG TNACATGTTT GTCATTTAA 120

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TAATAAATAA CATCTATTGA GTNCTTAAA

149

SEQ ID NO:1891

LENGTH:148

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02144

SEQUENCE DESCRIPTION:

GATCCGGGG GACCTGCCG AGGGGGCTGT CATGCGTTT CCAAGGTGCA CATTNNCAC 60  
GGAACAGAA CTCGATGCAC TGANCTGCTC CGCCAGGANA GTGAGCGTGT AGGTNCCTGA 120  
GGAATAAAAT GTTCCGATGA TGTGGAAA 148

SEQ ID NO:1892

LENGTH:147

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02145

SEQUENCE DESCRIPTION:

GATCCCCGTT CTTCAAGCTT CTCTGCTCAG TGTCTACTAA CGACCGACAT TTGCTAATGT 60  
AAATAATAGT AAATNATTGA GAATTCTAAT TCTTTACAC AGTCTGTTT TAATCTATTT 120  
TAATTAATAA AAATCTATGA CTCTAAA 147

SEQ ID NO:1893

LENGTH:146

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02146

SEQUENCE DESCRIPTION:

GATCTGGGAG TAAACTTAAC ATTCACTGTG TCTCTGCTCT GCATCCGCCA TTTGTGTGTG 60  
TTTCTGGACT GTGGGCTGTG TGTACCTTGG TTGGTGACTC AGTGAGAAGA AGCAGGAATN 120  
CCAAAGATAC TGTGAATNTT CTGAAA 146

SEQ ID NO:1894

LENGTH:144

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02147

SEQUENCE DESCRIPTION:

GATCTAAATG TCTAGTTTG TATTCTTTG TGTGTGTTCA CTGTTCTCA GTATTACAC 60  
TTGAATAATT CTCTGTACAG GGGGGTTTGT GCTATAACT GGGATGTCTA ATTGCAGCAA 120  
TAAAGCCTT CTTAAAAAG GAAA 144

SEQ ID NO:1895

LENGTH:141

TYPE:nucleic acid

**00771**

**2153480**

TOPOLOGY: linear

CLONE:HUMGS02148

SEQUENCE DESCRIPTION:

GATCTGGAA ATGCTTGAAG ACCACAAGGC TGAAAAGTGC TTTGCTGGAG TCCTGTTCTC 60  
AGAGCTCAC AGAACACACG TGTGTTGTA TCTTTAAAGA CTTGATGAAT AAACACTTT 120  
TCTGGTCAAT GTCAAANNA A 141

SEQ ID NO:1896

LENGTH:142

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS02149

SEQUENCE DESCRIPTION:

GATCCAGATA AACTTCCTG TCATGTGTTA GAACTTTATT ATTATTAATA TTGTTAACT 60  
TCTGTGCTGT TCCTGTGAAT CTCCAAATT TGACCTTG TCTAAGCTAA TATATAGCAA 120  
TTAAAAGAG AGAAAGAGGA AA 142

SEQ ID NO:1897

LENGTH:133

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS02150

SEQUENCE DESCRIPTION:

GATCAAAGTG TGGGATGNNGC TGCAAGACGT AGAACCTACC TGCCCTGCC CCGTCCCCNC 60  
CCTTCCTTAT TTATTCCTGC TGCCCCAGAA CATAGGTCTT GGAATAAAAT GGCTGGTTCT 120  
TTTGTTC CAA 133

SEQ ID NO:1898

LENGTH:130

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS02151

SEQUENCE DESCRIPTION:

GATCTAAGTT GCATCTTAA TCCTGGTGGT CTTGCCTTCT GATTTTAAT TTGTATCCTT 60  
TTCTATTAAG ATATATTTGT CATTTCCTCT TGAATATGTA TTAAATATTC CCAAGCAATC 120  
CAGTAACAAA 130

SEQ ID NO:1899

LENGTH:247

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS02152

SEQUENCE DESCRIPTION:

GATCGAGGAG ATGCCCTCTG AACGCCCTGTC CGGGAGCACC CGCCAGGGG CAGCCTGTGC 60  
CCAGCTAAC GACTCCTCC AGGAGTATGG CACTCAGGGG TGCCAGGTCTN TNAGGGCTGC 120

**00772**

CCTCCCACNN CCGCTGGAG AACCTNAAC CTGGGAACCA TGAAGCTGGA AGCACTGCTG 180  
 TGTCGGTTT NATAACACA GCCTGGGACC AGGGCATATN AAAGGCTTT GGCAGCAAAG 240  
 TGTCAAA 247

SEQ ID NO:1900

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02153

SEQUENCE DESCRIPTION:

GATCTTCCTG CTACCCCTTT GGATTCTAAG TGGTTCCAAG CTTAACTTGA GACCTTCCT 60  
 TCAAATCTAA AATTGGCAAA AAGTCACTTA AAATAGTGGAA CTTCTGTAAT AAAGGTTGCC 120  
 TAAAATAACA AA 132

SEQ ID NO:1901

LENGTH:128

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02154

SEQUENCE DESCRIPTION:

GATCTACAGG TTNCATTCA ACCTGTTCT AGGTTTTTT GTAAATTAG TTTTGATTAA 60  
 GCATTATAAG CATTGAGTC TATAAACTTT ATAGTAGCAT CTTTCAGAAAT AAACATTTTT 120  
 AATTGAAA 128

SEQ ID NO:1902

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02155

SEQUENCE DESCRIPTION:

GATCCATGAG TTGCCCCGGG TTTCACTGGC CCAAGTGGTT TGTGCTAACCC ACGTCTGTCT 60  
 TCACAGCTCT GTGTTGCCAT GTGTGCTGAA CAAAAAAATAA AAATTATTAT TGATTTATA 120  
 TTTCAGGGGA AA 132

SEQ ID NO:1903

LENGTH:128

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02156

SEQUENCE DESCRIPTION:

GATCCAAGAC AGAATAATGA ATGGACTCAA ACTGCCTTGG CTTCAGGGGA GTCCCGTCAG 60  
 GNCGTTGAGG ACTTTGAC CAATTCAACC CTTTGCCCCA CCTTTATTAAC AATCTAAAC 120  
 AACGGAAA 128

SEQ ID NO:1904

2153480

LENGTH:126

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02157

SEQUENCE DESCRIPTION:

GATCCACAGG GGTGGTGTCA AATGCTATTG AAATTGTGTT GAATTGTATG CTTTTCACT 60  
TTTGATAAAAT AAACATGTAA AAATGTTCA AAAAATAAT AAAATAATA AATATGAAAC 120  
CTTAAA 126

SEQ ID NO:1905

LENGTH:122

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02158

SEQUENCE DESCRIPTION:

GATCTACAGA TGAATATTTA ACTCAATAGA AAAATTATT TAGAACACAT TGTATTGGTA 60  
TTACAACCAAG ATTATATTCT TGACGTTGAC TTCATTAAGA TTATCTACAA TTTCTAATA 120  
AA 122

SEQ ID NO:1906

LENGTH:121

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02159

SEQUENCE DESCRIPTION:

GATCTCATGG ATACAAACAG GTGACCTTGC CAATTGGTGC TTTTGTGTG TTTAAGAAAA 60  
GAACAGTAGT AACCTTGTC CCTGGNTACC AATAAAAAT CTATTATTT TTTAAAAGAA 120  
A 121

SEQ ID NO:1907

LENGTH:119

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02160

SEQUENCE DESCRIPTION:

GATCTGACCC CTGTCAGATG NAAATGATTC ACAGCTCTGG CAGTTCCAA GTCTGGGAG 60  
GGGTATAGGT TTGAAAGGCT GTTGAAAGA GGAATGTTA ATAAAGGCTT TGATTTAAA 119

SEQ ID NO:1908

LENGTH:121

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02161

SEQUENCE DESCRIPTION:

GATCCCAGCT GGCCCCTATG TTGTGTTCTG NGACTGAGGC CTTTGCTGTG AACTGCAGTG 60

00774

**2153480**

TTTCATACGA ACCATCTTC CTAGTGCATG AGAAATAAAG ATTATTAAG TAATGAGGAA 120  
A 121

SEQ ID NO:1909

LENGTH:116

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02162

SEQUENCE DESCRIPTION:

GATCTCACTT TTCAGGAAAC TAAAAATTAA CCCATTATTG GGAAGCTTAA ATGAATTGAA 60  
GCTATGCAAG TCTTTATAT TATTAATAT TTAAAAGTAA ACCTGTACTA ATCAA 116

SEQ ID NO:1910

LENGTH:116

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02163

SEQUENCE DESCRIPTION:

GATCGATATG CTCATAAAAG TGCTCAATTA TATTNCTGT ATTTGTATG NTGTATTT 60  
CAAGACGTAT ATTATTTAC TATTAAGAA AAAATCATT TTTTTTCCC GAGAAA 116

SEQ ID NO:1911

LENGTH:124

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02164

SEQUENCE DESCRIPTION:

GATCCGGGCA TGGGAGACCC CACTTAGAA AGGGTCGTCA CTCCTTAAT CCTCTACTCA 60  
ACAATGTACT CTTTACTTT TATATTAAGA AAAATAAAAT AAATATGTGC CTAAAACCTC 120  
CAAA 124

SEQ ID NO:1912

LENGTH:115

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02165

SEQUENCE DESCRIPTION:

GATCCACTTC TACTTAATGA GTAGTAAATA TATTCNTTT TCCTTATGAT TTTCTACTA 60  
TTTNCNTAG CTTGCTTTAT TATAAGANTAA TAGCATATAA TATAAATAAA ATAAA 115

SEQ ID NO:1913

LENGTH:112

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02166

**00775**

**2153480**

**SEQUENCE DESCRIPTION:**

GATCCAGAAA TTGTGAACAA TGTGATTT AGTAGCGTGA CTTGCCCTTC CCTTTAAAAA 60  
CATCTTTAC AAATCTGTCT TGGAATAAAG TCTATTTCT GCCTTTGGA AA 112

**SEQ ID NO:1914**

**LENGTH:112**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02167**

**SEQUENCE DESCRIPTION:**

GATCCTAATT GCCTAGAAAT ATCTTCTCT TACCTGTTAT TTATCAATT TNCCAGTAT 60  
TTTTATACGG AAAAATTGT ATTGAAAACA CTTAGTATGC AGTTGANNNN GN 112

**SEQ ID NO:1915**

**LENGTH:112**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02168**

**SEQUENCE DESCRIPTION:**

GATCAACCGT GAAGCGTAAC AAATTCTGTA TTTAGTTTT TTTCTGTTG TGGTGGTTT 60  
TGTTTTGTTT TTTGTTTG TAAGATTCTA AATAAATNAA ATACGAGTCA AA 112

**SEQ ID NO:1916**

**LENGTH:112**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02169**

**SEQUENCE DESCRIPTION:**

GATCAAGACT NCAGTTGGG AATGCATGGA CACCGGATTG GTTTCTTATT CCTTCACTTT 60  
TGGGAAAT CTCNCNTNT TTAAAAAGTG ATAATTG TGTTAGGTCA AA 112

**SEQ ID NO:1917**

**LENGTH:112**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02170**

**SEQUENCE DESCRIPTION:**

GATCAACGCG ACTGTATTT GAAACATTCC AGGAAGGTTA CTTCTGTCA AACTGCCTG 60  
GCAGTGTG TTCAAANCTT GTATTTATA AATGANCATC TGACTTTACA AA 112

**SEQ ID NO:1918**

**LENGTH:162**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02171**

**00776**

**2153480**

**SEQUENCE DESCRIPTION:**

GATCTATCTT AAGAAAGTGAC CAGGAAAGAG GTTCATTGAA ATAATCATGC ATGAAGCGCC 60  
AAAGATGCAC CATGTAGAAT TTTCACTTTG TACTGGCAGG CTCGTTTAC CTGATTCTAG 120  
AATATTTAAG AATCTAAAAA TAAAGGGCAA CTCTGACTTA AA 162

**SEQ ID NO:1919**

LENGTH:111

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02172

**SEQUENCE DESCRIPTION:**

GATCAGGGAA CTAAGCATT A TGTAATTCA CCAGCAAGAT GTACAGNACG CCTGTNTTTA 60  
CATTGTTTT ATGGAACTAG CAGAATAAAAN CATCTATTTT AAAAATGCAA A 111

**SEQ ID NO:1920**

LENGTH:275

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02173

**SEQUENCE DESCRIPTION:**

GATCTGCAG GAAAGCCGCT ACTCCAACCC CAGCCTACCT NTGGTGACCA NATCCGTCCC 60  
ATAGCAAAGC CCCTGCACAG ACTCCAGCCG AGCCCCACACC TGGNTATNAG GTGGGCCAGC 120  
GGAAGCCCT CATCTCCTCG GTGGAGGACT TCACCGAGTT TNTNTGAGGC CGGGGCCCTC 180  
CCTCCTGCAC TGGCTTGGA CGGTATTGCC TGTCAGTGAA ATAAATAAAAG TCCTGACCC 240  
AGTGCACAGA CATAGAGGCA CAGATTGCAG TCAAA 275

**SEQ ID NO:1921**

LENGTH:114

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02174

**SEQUENCE DESCRIPTION:**

GATCAGGACA GAGACTTGGG GGCCATCCTG CCCCTCCAAC CCGGACATGT GTACCTCAGC 60  
TTTTCCCTC ACGTTGCATC AATAAGCTT CTGTGTTGG AACAGNTAAA CAAA 114

**SEQ ID NO:1922**

LENGTH:108

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02175

**SEQUENCE DESCRIPTION:**

GATCCCAAGC NTCCCGTCCC TTGGAAAGTN CAGCCAGAAT CTNCGTCTG ACCCCCCGACA 60  
GCCCAAGCTA GCCCACTTGT CATCCATAAA GCAAGCTCAA CCTTGAAA 108

**SEQ ID NO:1923**

**00777**

**2153480**

LENGTH:272

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02176

SEQUENCE DESCRIPTION:

GATCCCCAG GTTCAGACTG AGCTCCCCCT TCCCAGTAGC TCTTGCATCC TCCTCCCAAC 60  
TCTAGCCTGA NTNCTTNCA ATAAAAAATA CAATTCAAGT TGCTTCTCAT GGATGGCACT 120  
GCTTTCTGA GGACTCAAGG TGCCAAGATG GAGGGGCTGA CTCAGTCCAG CCAACNTTTA 180  
ATGAGNACCT ANNNNGGTGTA TGGAGCTCTA ACCCATGGGT CCATGGGAAT AAAGCAGTGA 240  
ATAGTAACAA TAAATAATTG TAACAGCANA AA 272

SEQ ID NO:1924

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02177

SEQUENCE DESCRIPTION:

GATCTGACGT TTTCTACGTA GCTTTGTAT TTTTTTTTT TAATTTNAAG GAACACTTAT 60  
GAAGCCCTGC CATNCCCCTC CCGNGTCTAA TAAAACGTAT AATCACAAA 109.

SEQ ID NO:1925

LENGTH:104

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02178

SEQUENCE DESCRIPTION:

GATCAACTTG TGCTGCCAG AGGACGCCAA TGAAGTTGA AACACCAACA ATCAGAGATT 60  
TTGTTCTGT TCCTCATTAA ATCATGAGCT TTTGTGCCGA GAAA 104

SEQ ID NO:1926

LENGTH:104

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02179

SEQUENCE DESCRIPTION:

GATCGTGTGT GTAGGTGGTG TTGTGTGGTT TTCCTTTGTG AAGGAGAGAG GGAAACTATN 60  
TGTAGCTTGT TTTATAAAAA ATAAAAAAATG GGTAAATCTT GAAA 104

SEQ ID NO:1927

LENGTH:103

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02180

SEQUENCE DESCRIPTION:

GATCCTCCCA CTTCCACCTC CCAAGTAGCT GTGGCTACAG GTGTGTGCCA CCATGTCCAG 60

**00778**

CTGATTTNG TATTTNAGT AGGGACAGTA TTTCTCCATG AAA

103

SEQ ID NO:1928

LENGTH:106

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02181

SEQUENCE DESCRIPTION:

GATCTAAATC TCATTTATG CTGTATTTA TATCTNAGTT GTNTTGAAA ACGTTTGAT	60
TTTTGAAAC ACATCAAAAT AAATAATGGC GTTTNTGTA TGCAAA	106

SEQ ID NO:1929

LENGTH:272

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02182

SEQUENCE DESCRIPTION:

GATCTGGACG AATGATACCA AACGTTCTT TCTAACATTG TATTTATAA CTCCTGGCCTA	60
TGATTGTNTT GTGCTTGCA TTAAAAAAA AAATTTGAGA GTGGTAGAAT TACTTCTGTT	120
ATCTGAAATA CCTGAGATGC ACTTTAACT GTGAAATGT AAGCNCTGAG GGCAGGGNCC	180
GTATCTNATT TACTGTTAGT ATCCGTTGCA TCTAGTGTGG TGCACCTGGC ACACAGTAGG	240
CACTCAATAA ATATGTATTG ATTAAAANCA AA	272

SEQ ID NO:1930

LENGTH:171

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02183

SEQUENCE DESCRIPTION:

GATCTACAGC TCCTGGATAA TTGCTTGATT CTCGCCAGAG ACTGTCAATA TTNATTCA	60
TGCCATTACC AATAAATCAT TGCTTTGTT NAGATGGTAT CACTAGTGTG TCCATTGTAA	120
TCTTGACACA TGCAATTGTA AATAAAAGTC ACCACTTTG CCAAGCTAA A	171

SEQ ID NO:1931

LENGTH:99

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02184

SEQUENCE DESCRIPTION:

GATCATACCA CTGCACTCTA GTCTGGGTGA CAGAGCGAGA CCCTGTCTT AAAAAAATAA	60
ATAAAAAATAA ATAAAATAA AACTGGCACT ACGTTAAA	99

SEQ ID NO:1932

LENGTH:99

TYPE:nucleic acid

**2153480**

TOPOLOGY:linear

CLONE:HUMGS02185

SEQUENCE DESCRIPTION:

GATCTGTGTC TTAAAACCTTA CTGGAATGGA AATCTATGAA TTATTGCAAA TTGTAATGCT 60  
GGAAACAAAA AATAAATCCT TGGTTAAAGG GTTTGTAAA 99

SEQ ID NO:1933

LENGTH:99

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02186

SEQUENCE DESCRIPTION:

GATCCTGACA CTCTANCACT CGACTCTGCT GCTCATGGGA AGAACAGAAT TNCTCCTGCA 60  
TGCAACTAAT TCAATAAAAC TGTCTTGTGA GCTGATAAA 99

SEQ ID NO:1934

LENGTH:90

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02187

SEQUENCE DESCRIPTION:

GATCTTGACT TATATTCTGT ACCACATACA CTTCTGTGGA CTTTACAT TTGTGGTAG 60  
ACTTAATAAA GCATGTATAA AAGTGGCAA 90

SEQ ID NO:1935

LENGTH:91

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02188

SEQUENCE DESCRIPTION:

GATCAGGNTG CGGATAGACT TGTAAGGGTG TTTGCTGCAT ACAGTGTAAG CATTGTGACC 60  
GCCAATAANC TTCAATGGTT TCTACTGNAA A 91

SEQ ID NO:1936

LENGTH:91

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02189

SEQUENCE DESCRIPTION:

GATCTTCGT NTTCTAACGC GACTCTACTT TCATTGTTG CCAGCNTAGC TCGTTGCTGT 60  
TGCCCAATAA AGCTNGTGTAA CGTNCTGCAA A 91

SEQ ID NO:1937

LENGTH:86

TYPE:nucleic acid

**00780**

**2153480**

TOPOLOGY:linear

CLONE:HUMGS02191

SEQUENCE DESCRIPTION:

GATCTTACAT CTGCAGCTCT TTCTTCTTG AATTCCTAT CTGTATGTCT GCCTAATTAA 60  
AAAAATATAT ATTGTATTAT GCTAAA 86

SEQ ID NO:1938

LENGTH:86

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02192

SEQUENCE DESCRIPTION:

GATCATCAGT GTTCCTTTT ACTTATAAAG TTGGATTCTT TTTAGAATT TGTAATAAT 60  
AAAAACTGCT GCTTACACAC TGTAAA 86

SEQ ID NO:1939

LENGTH:91

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02193

SEQUENCE DESCRIPTION:

GATCTACCT GCCTGTACTA CTCTAGGGAG TATGCTGGAG GCAGAGGGCA AGGGAGGGT 60  
GGTATTAAC AAGTCAATTC TGTGTNGTAA A 91

SEQ ID NO:1940

LENGTH:84

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02194

SEQUENCE DESCRIPTION:

GATCATGAGT GACCCAGCTG TCTCACGTTG TTTATTCTGC GTCCCCCTCT CCAATAAAAC 60  
AAGCCAGTTG GGCGTNGTTA TAAA 84

SEQ ID NO:1941

LENGTH:79

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02195

SEQUENCE DESCRIPTION:

GATCCCCATG CCTAGCAGAG TGCTGGCACT TAGTAGGTCC TCAATAAAATA TTTATTAAT 60  
GATGAGATGA TGGAGCAAA 79

SEQ ID NO:1942

LENGTH:78

TYPE:nucleic acid

**00781**

2153480

TOPOLOGY:linear

CLONE:HUMGS02196

SEQUENCE DESCRIPTION:

GATCCAATCC CATAGACAGC TCTGGGCCTC TTGCATTGA GTTTTTAGA ATAAACTGC 60  
AGTATTTGG AAAGCAAA 78

SEQ ID NO:1943

LENGTH:77

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02197

SEQUENCE DESCRIPTION:

GATCCACTAA GGAAATGTTT TAACAGCTAG AGACCACTGC TTGCCTGAAA GGGCGTTCTT 60  
AAATTTGGTG CAGCAAA 77

SEQ ID NO:1944

LENGTH:76

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02198

SEQUENCE DESCRIPTION:

GATCCACTTC AAGAATTGCT TGCTTCAGG AAGAGAGATG TGTTCAACA AGCCAACTAA 60  
AATATATTGC TGCAAA 76

SEQ ID NO:1945

LENGTH:76

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02199

SEQUENCE DESCRIPTION:

GATCGACTTT GTGCTCTGT TGTCTAAAAT AGGTTTCCC TGTTCTGGAC ATTCATATA 60  
AATGGAATCA CACAAA 76

SEQ ID NO:1946

LENGTH:75

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02200

SEQUENCE DESCRIPTION:

GATCATAGAT TTCTGATTTT ATGTAAAATT TTGCCTAATA CATTAAAGCA GTCACTTTC 60  
CTGTGCTGTT TCAAA 75

SEQ ID NO:1947

LENGTH:74

TYPE:nucleic acid

00782

2153480

TOPOLOGY:linear

CLONE:HUMGS02202

SEQUENCE DESCRIPTION:

GATCTGTCAA AGAAAACCTTC CAAAAAGATT TATTAATTAA ACCAGACTCT GTTGCAATAA 60  
AAATCCTACA GAAA 74

SEQ ID NO:1948

LENGTH:73

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02203

SEQUENCE DESCRIPTION:

GATCCACTTT AGCAAACCCCT GCTGCAGAGG ACTGTAAAAAA CAAATAACTA AAAATAAACT 60  
TAGAAAAATAC AAA 73

SEQ ID NO:1949

LENGTH:73

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02204

SEQUENCE DESCRIPTION:

GATCGTAATG TTTATCATGT TACTTCCCCA CCCCTACATT TTTTGAATAA AAATAAGGAA 60  
TTTTATTCTC AAA 73

SEQ ID NO:1950

LENGTH:72

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02205

SEQUENCE DESCRIPTION:

GATCNCTGCA ACTAAGNTTA AAGCAGTGTG ACTGTGTTGC TNAAATATCA AGTATTGTTT 60  
ATAACCACCA AA 72

SEQ ID NO:1951

LENGTH:66

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02206

SEQUENCE DESCRIPTION:

GATCTCAGCT ATTAAGATGC AAGTCTGCCA ATGCTCCTGG CCAAATAAAC CTCTTCCTTC 60  
TTTAAA 66

SEQ ID NO:1952

LENGTH:65

TYPE:nucleic acid

00783

2153480

TOPOLOGY:linear

CLONE:HUMGS02207

SEQUENCE DESCRIPTION:

GATCCTCTTG TACTGGGAGA GGTGCCTTT GTATCCCCA TTAAAGGTAG AAAACCACCC 60  
TGAAA 65

SEQ ID NO:1953.

LENGTH:62

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02208

SEQUENCE DESCRIPTION:

GATCTCGAAG AAAAAAGGGG GAGACCAAAG AATAAAAGAA GGGTTTCCCC ACTAAAATGA 60  
AA 62

SEQ ID NO:1954

LENGTH:62

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02209

SEQUENCE DESCRIPTION:

GATCCAGCTG TNCTTAAGAG CCAGTAATGT CTTAATAAAC ATGTGGCAGC TTNNTTTGA 60  
AA 62

SEQ ID NO:1955

LENGTH:61

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02210

SEQUENCE DESCRIPTION:

GATCTCACAT TTCACCCAG GCTCACTGA GGATGTGGCT TATTAACAC GGAAGTGCAA 60  
A 61

SEQ ID NO:1956

LENGTH:59

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02211

SEQUENCE DESCRIPTION:

GATCAGCCAT GTNTATCTTT TTAAAAAATA AACAGGTTGC TTTATTTCTT AGCTTCAAA 59

SEQ ID NO:1957

LENGTH:59

TYPE:nucleic acid

TOPOLOGY:linear

00784

2153480

CLONE:HUMGS02212

SEQUENCE DESCRIPTION:

GATCAGATGA GATTTAATGA AGACCCAGTG TAAAGAATAA ATGANTCTTA CTCCTTAAA 59

SEQ ID NO:1958

LENGTH:57

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02213

SEQUENCE DESCRIPTION:

GATCTACACC TGGACTGCC AGGTCTATAA GCCAATAAAG CCCCTGTTA CTTGAAA 57

SEQ ID NO:1959

LENGTH:56

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02214

SEQUENCE DESCRIPTION:

GATCGAAGAA AAAGGGGNGN CAAAGAATAA AAGAAGGGTT TCCCCACTAAA ATGAAA 56

SEQ ID NO:1960

LENGTH:111

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02215

SEQUENCE DESCRIPTION:

GATCAGAAAT GTGANTGTG CATTGAGTAT TAAAAAATTA GATGTATATT ATNCATTGTC 60

CTTTACTCAT GAGTACCTTA TAATANTANT ANTGTATTCT TTGTTAACAA A 111

SEQ ID NO:1961

LENGTH:167

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02216

SEQUENCE DESCRIPTION:

GATCTATTCC CCATCCCAAG GCAAGCATGA ATAAAATTAG GTTAAACGTA GCATGTGGCA 60

TCCGAGTCTC TTAGAATTG TTCATCTAT TTNATTTAT TGAATACTGT CTGTATCTT 120

GGTTATCCTG TTTGAAGAAA AAGGACAAAT AAAACATGGC CAGCAAA 167

SEQ ID NO:1962

LENGTH:516

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02237

SEQUENCE DESCRIPTION:

00785

GATCCTCATT CTCACCCATT TGGCTAATCC AGGAATATTG TTATCCCTNA NCCATTATAT 60  
 TNAAGTTGAG AAATGTGACA GAGGCATTAA GAGTATGGAC TTTCCCTTCC TTTTNCTTT 120  
 NCTTTTTCC TTTTGAGAT GGAGTCACAC TCTCCAGGCT GGAGTNCAGT GGCAAACTCT 180  
 CGGCTCACTG CAATTNCCGT CTCCCAAGTT CAAGCGATTC TCCTGCTTA GACTATGGAT 240  
 TTCTTAAGG AATACTGGTT TGCAAGTTTG TTTCTGGAC TATATCAGCA GATGGTAGAC 300  
 AGTGTATG TAGATGTGTT GTGTTTTA TCATTGGAT TTTAACCTGG NCCGAGTNAA 360  
 ATAATCAGGT TTTGTCATT CACACTCTCC CCCAGTTT GGGAAATAACT TTGGAAGGTA 420  
 AGGTTCACTN CCCTAAGGCC GGTGGGTTN CTGTTGGACC TATGGGGGN CCACAACTGN 480  
 ACTATTAAT TCCNCCCCAC TGTAAGGGGC AAAGGN 516

SEQ ID NO:1963

LENGTH:483

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02238

SEQUENCE DESCRIPTION:

GATCTTCCA GATGACTTGT CCAAGGTAC ACAGGAGTCA GATGGCCTT CCACTACCCC 60  
 ACAACACAGA TGCACTAGTTA CTCTGTGGGC TAATACAATT CAGAATTCAAG AGCTCTGCC 120  
 ATGGTCACCG GTGGAATCCA CCAGCCATCT CCCTGACCTT GCTCTCCTCT GTTCTCCTCG 180  
 TCTCCAGGGT CCCATGATTC AGGGCGAGCT GGCTTCAGGA TGTGGCAAG AGGGGTTTA 240  
 GATGGAAGGG TTTCTCCA GGACAGAATG TTAAGCCAAG CCTGGACTTA ATTGTTCCAA 300  
 GATGTCGTTA GAATTGGTGG ACAATTTTT TTTAATGATT AGCAAAGGAC AAGGCTTTG 360  
 GTGGTCATTA GTATTGTTCA TCAAATATTC CAGTTCTCCA CAATTCTGGG GTACCATGGT 420  
 ANGGATGAAC CTTCCCTGTC TTTTCAGGGT TAAGTTAGC TCTNGTGTG TGCTTTGTC 480  
 AAA 483

SEQ ID NO:1964

LENGTH:452

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02239

SEQUENCE DESCRIPTION:

GATCGCTGGA GCTGTGGTCG CTGCTGTAT GTGGAGGAGG AAGAGCTAG ATAGAAAAGG 60  
 AGGGAGCTAC TCTCAGGCTG CAAGCAGTGA CAGTGCCAG GGCTCTGATA TGTCTCTCAC 120  
 AGCTTGAAA GTGTGAGACA GCTGCCTTGT GTGGGACTGA GAGGCAAGAT TTGTTCTGC 180  
 CCTTCCCTTT GTGACTTGA GAACCCCTGAC TTTGTTCTG CAAAGGCACC TGCAATGTGTC 240  
 TGTGTTCTTG TAGGCATAAT GTGAGGAGGT GGGGNGACCA CCCCACCCNN ATGTCCACCA 300  
 TGACCCCTTT CCCACGNTGA CCTGTGCTCC CTCCCCAACATC ATCTNTCTG TTCCAGAGAG 360  
 GTGGGGCTGA GGTGCTCCA TCTCTGCCTC AACTTCATGG TGCACTGAGC TGTAACNTTT 420  
 TCCTGNNTAT TAAAATAAGA CCTGAGTTA AA 452

SEQ ID NO:1965

LENGTH:433

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02240

## SEQUENCE DESCRIPTION:

GATCAGACAC CAGAGGGTTG GGCATTCTTG CAATACCTTA ACAGTGCTGA AATCTGCAGC 60  
 ATGGTACTAA GGAAGTTAAA GTTGAAATGT AACCACTTTA TTTAAAAGGT TTTTTCTTT 120  
 AATTTAAATG AAATGGTGGT TGAAGTGAAC ATGATTTGT TGACCATGTT CGTGAATTAC 180  
 AGATGCAACA TGCATTGGTA GAATCGTGTG ATGGTCTTT GTGATACTTA ATTTTACAT 240  
 ATCCCAGTCT CTGTATGTAT CTGCATAGAC AAAGAAAAAA CAAACTCCTG CTTGCTTT 300  
 ATTGAANGGG TTTCAGGAC TGCAGTGTCTG CTCCAGGCT CTGTTTAAG TATGTGTATC 360  
 CTTGCTGT ATTTGTAAT TAAAAAAATA AGGAAAAGGA NGCCTTTATT TGTTGGNGCA 420  
 TGTTGGCATT GTN 433

SEQ ID NO:1966

LENGTH:424

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02241

## SEQUENCE DESCRIPTION:

GATCTGCAA GAAAGCTTTT CTTNCGTGCG TGCCCTCAGNC TCCTCCCTAT GCCTCTNGCA 60  
 CCTGCGCAGA AGTGCTGGCT GTGCTGANGT CACCATCATC TTCCCTCTCCC CCAGCCTCCC 120  
 AGGCTGGATG GCATGGACTG TTTGCTGACC TCTGTTCTCT TAGGGCATGG GAGGTGGGAG 180  
 GATATCAAAT TCTNTAGCCC TTCCCTCCA TTCTCCCAAG NAGAGAGNTT CCCATTCTC 240  
 CTCGGCCATT GTACCTAGCT CTTGTCCCTA GCTGCATTC AGTGGACCAT GGATAGAGGG 300  
 ACTGAGNGTT AGACGGGGAA GACTGGCAGN GAGGCACGCA GGTACTGTGA AAATCCTNNC 360  
 CTTTGACCTC CNCCAGTGGG AGAGGGGNGT TGGGGTTTC AATGTGAGAA CAGNAACAAA 420  
 TAAN 424

SEQ ID NO:1967

LENGTH:418

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02242

## SEQUENCE DESCRIPTION:

GATCNCCCTGC TCTCCAAGCA TGGCATCTAT GTGCAGGCCA TCAACTACCC AACTGTCCCC 60  
 CGGGGTGAAG AGCTCCCTGCG CTTGGCACCC TCCCCCCCACCC ACAGCCCTCA GATGATGGAA 120  
 GATTTTGTGG AGANGNTGCT GCTGGCTTG ACTGCAGGTGG GGCTGCCCT CCAGGATGTG 180  
 TCTGTGGCTG CCTGCAATT CTGTCGCCGT CCTGTACACT TTGAGCTCAT GAGTGAGTNG 240  
 GAACGTTCCCT ACTTCGGGAA CATGGGGCCC CAGTATGTCA CCACCTATGC CTGAGAAGCC 300  
 AGNTGCCCTAG GATTACACCC CCACCTGCAGN TTAACCTGGG TCCAGGCCTA CTCCCTGTCTT 360  
 CTGCTTTGTT GTGTGCCTCT AGCTGAATTG AGCCTAAAAA TAAAGNACAA ACCACAAA 418

SEQ ID NO:1968

LENGTH:413

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02243

## SEQUENCE DESCRIPTION:

GATCATTGAA TAAAACGGGT GTAGAGTACA GGAATGGGC AGACCGGATT CAGGTGAACA 60  
 GCACANGNAG AATATGAGGT GGTTCTAGG AGCAACACTT TCGACCTCCA GTTCTCCNTG 120  
 ATGACAGTAG CTGCTCCNN GNGAAAAATC CTCACTTATT AACTCTCTT TCTTGATCT 180  
 CATTTTATA GAGCTACTCA TCCTTATTTG GAAAAACCAA CAACAAAAAA GGCTTTAGA 240  
 AAATGGTTGT AAATCTGACT TCTTGCAAG TAACTATGTA TATTGAAAT AGGATATAAA 300  
 AAGGCCTTT TTCTAAATAA GGCTTAACT GCCTGTAACA TGAAAATCA AACTAAACCA 360  
 CTTAACTCAN TGNACTACCT TATGGGTTTG TCTGACATCC CTCAACTTAC CAN 413

SEQ ID NO:1969

LENGTH:412

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02244

## SEQUENCE DESCRIPTION:

GATCCCACCG AGAAGAACCA TGGGTGGACC CGAACTCCCC GGTGCTCTNA GAGGACCCAN 60  
 NNCTTGTGC CTTGGCAAAA AAGCACAAGC GAACCCCAGC CCTGATTGCC CTGCGCTACC 120  
 AGCTACAGCG TGGGGTTGTG GTCCTGGCCA AGAGCTACAA TNAGCAGCGC ATCAGACAGA 180  
 ACGTGAGGT GTTGAATTC CAGTTGACTT CAGAGGAGAT GAAAGCCATA GATGGCCTAA 240  
 ACAGAAATGT GCGATATTG ACCCTTGNTA TTTTGCTGG NCCCCATAAT TATCCATT 300  
 CTGATGAATA TAAACATGGA GGGCATTGCA TGNGGGTCTA CCAGAAGNNC NTNGGGTNTT 360  
 GGANTGGTNG CANAAGNGGG TNGGTTCTTA TGGCTGGGG NACTTGGCA AN 412

SEQ ID NO:1970

LENGTH:406

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02245

## SEQUENCE DESCRIPTION:

GATCCAAAGT TCATACATT TATGTACAAG ATACATTAGA CTTACAATAN AGTCTAATTA 60  
 TTAGACTTT ATGTCAGTGG ATTGTGCTTG CAGAAATACA GAAGTAACAT ACTGACCCCTA 120  
 GGTGAGGAGT TTCTTACATG GTTAACTGGA TTGACCCAT TGGAGTAAAAA GATTTTGCT 180  
 GTTACCTCGA TGCTCCTGCA GTTGTACCT CAGCATGCCA CTGTAGTCCT TGACTCTCAC 240  
 ATTAAAACCA ACTTTGGCTA GGTACTGGTG GCTCACACCT GTANGTAATC CCAGTACTTT 300  
 AGGAGGGCTGA GACTGGAGGA TTACTTGAGT CCAGGAGTTG GAGACCAGCC TGGCCAATAT 360  
 AGACTGTCCC TACAAAGGAA AATAAANTTT GTTTCATCTT TCNAAA 406

SEQ ID NO:1971

LENGTH:401

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02246

## SEQUENCE DESCRIPTION:

GATCAAATAT GGCACTCAACA ATATCCGGGA GCTGGTGGGC CACAAGGTGA ACCTGCAGAT 60  
 GGTGTATGAC AGTCCCTGT NCCGCCTGGA TGCCGAGCCG AGGCCCCCTC CCACACAGGA 120

GGCTGCGTGA CATGGGCCAC TCTAGGACAG GTCATCCTCC CCGAGTCCCT GCTGCTGCC 180  
 TCCTTGAT CCCCTGGCCAG TNACCTTGT A TTTATGAGGC CTCTGTNAGG CAGCCCCAC 240  
 CTTCCCTTT CCCACCTGTC CCAGGACCAG AATCCCAGGG ACAGAGGACT GGGTAGCAGG 300  
 TTCCCTTGTG TGTCCTGTG GGTGTGTCTA CTGTGAGGGT GGGCCCTGAG GAGACCTGTG 360  
 GGCCANCTAT TGTCTAATAA AGTGGGGCAG TTGCCCCAA A 401

SEQ ID NO:1972

LENGTH:384

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02247

SEQUENCE DESCRIPTION:

GATCTTNAT GTGTGTTNATT TTGGAGAGAAA GCACAAGGAG TATTCTCTT CTAGGGAAAG 60  
 TTGTGAACCC AACCGGAAGCG TAGTTGGAA AAAGGCCATT GGCTAATTNC ACGTGTGTAT 120  
 TGCAATGGGA AATAAAATAAA TAATATAGCC TGGTGTGATT GATGTGAGCT TGGNCTTGCA 180  
 TTCCCTTATG ATGGGATGAA GATTGACCCC TGGCTGACCT TTNTTGGCTG TGGAAGAGGN 240  
 CAATCCTATG GCAGAGCATT CAGAATGTCA ATGCGTAATT CATTATTATC CAAAGCATAG 300  
 GAAGGCTCTA TGTNTGTATA TNNCCCTNTG TCGGAATACC CCCTANCTC ATTTTCCNCT 360  
 TAATAAATT CACTGGGTTG NAAA 384

SEQ ID NO:1973

LENGTH:383

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02248

SEQUENCE DESCRIPTION:

GATCCTGCTT CTCCCTGGG GTCTTCTTGG TTCCCTGAAG CCCCTCTTCC GGAGTCCCTG 60  
 CCCTCTATCG GCTCTGCCTC CTGCTTCTT TCTGTATTGC CATGATTTT GCTAAGGATA 120  
 AAGGACAAC TCAATTGGCTT CTTGGGAAA CTTGCAATCT CCCCCAAACAG GCCCCTCTGA 180  
 GATTCTCTT TTGCCCCCT TCGATATTTT CTCCAGTTTC CTTGATTCTT TTGATAACGTC 240  
 CCCATTCAAGG CCACTCTGGC CTTCCATCCA ACCTGCCAGA ACTTTTCCA CTTCAGCACT 300  
 TCAGTCACCT AAACATTAGG GCTCCCTGCC CTAAAGGGAC TCAAAATCCT GCAAAANCAA 360  
 CCACNNAAGG ATAAAAAAAT AAA 383

SEQ ID NO:1974

LENGTH:375

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02249

SEQUENCE DESCRIPTION:

GATCAACAGG AAGAACATGG TGGTCTCCTT TGGAGATGGG GTTACCTTCG TGGTCGTCT 60  
 ACACCAGGTG TGGAGAAC ATCCTGTCCA CCGTGACTTT CTAGGCTTCT ACGTGGTGG 120  
 CAGTCACCCG ATGTCAGCAC AGACGCATGG GCTGNTGGGG CAATTCTTCC AACCCCTTGA 180  
 CTTAAAGTG TCTGACATCN GGCCAGGCTC TNACCCACA AAGCCAGATG CCACATTGGT 240  
 GGTGAAGAAC CATCANGNTG ATTNTNACCA GGGGCTCCN GAAAGANTAC AGNAAAGGNA 300

2153480

TGCCANGCAT CGGCACGAAN GGTTGTCTTC TTGGTTCGNN CACANCAACG GGGAAATGTTG 360  
TTGNTTGANT GGTGN 375

SEQ ID NO:1975

LENGTH:370

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02250

SEQUENCE DESCRIPTION:

GATCTATGTG CACACACCCN CATCACATGG AATGGGCTGG TCTAGGCTGT GCCCTGNAC 60  
CTTCCTTAGA GTGAATAGGG CGGACACTCC TCTCTTCC TGTAGCGTGT GGACCGGTCC 120  
ACGCAATTCT TTATCCTGTG AACTCATCTG AGTGGGAGGT GGTGGACACT GGGGTTTCCT 180  
TCCCTCTCTC CGTAGCATCC GTTGGTCTTT CTCTCCATCT CTGTTGGTTT GTCTGTCTCT 240  
GTCTTCTCTC CAATCCCTAG GGGAAAGGGGG CATTGGCTA GGGGGTGCCC CTGTGAGCCT 300  
NGACCTTGCC CCCTCGTCCN TCTCCCGAGT GTTCCAGGA CCCCCAATAA ACCTTGTCCCT 360  
GTCAGTCAAA 370

SEQ ID NO:1976

LENGTH:367

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02252

SEQUENCE DESCRIPTION:

GATCGATACA GGGGAGGGGG GAGGTGGAAA CAAACAAACAA AACTGTACAT TTTTTTTAAA 60  
GTTTGTGAA AAGAAATATTG TCTTATTCTA TAAAACATTT CAAACCTAGT TAGAGATTTG 120  
TAATCAAAAA ACATTTGCGC AGAAAGCAGC ACTTAGGGCT GCCTGTTCTA TACCCCTACAG 180  
TCAGACAGGA AAAGANCTGA AAATGGCACC CTTCTGACAT TCTGNGGCAG CTGGNCTNGC 240  
AGCCANGTAA NGNGNAGTTT ATGAGGTGGT GTGGGGAGGG TGGGGGAGGC NGCGTGGGGG 300  
NTTCTCTCCA CAGCAGGTGG GNCGAGGCAA GNNTTGNGN GCCAGANGN GNGCTTTGTN 360  
CNTGGGN 367

SEQ ID NO:1977

LENGTH:353

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02254

SEQUENCE DESCRIPTION:

GATCTCCAGC CTTACCGCGG CTCGAAATGG ACCCCAACGT CTCTGCACC ACTGGTGTCT 60  
CCTGCCCTG CACCGGCTCC TGCAAGTGCA AAGAGTGAA ATGCACCTCC TGCAAGAAGA 120  
GCTGCTGCTC CTGCTGCCCT GTGGGTGTG CCAAGTGTG CCACGGCTGT GTCTGCAAAG 180  
GGACGTTGGA GAACTGCAGC TGCTGTGCCT GATGTGGAA CAGCTCTCT CCCAGATGTT 240  
AATAGAACAA GCTGCACAAC CTGGATTTT TTTTCAATAC GATACTGAGC CATTGNNNC 300  
ATTTCTTTT ATGTTAAATA TGTGAGTGAC AATAAAACAA TTTTGACTTG AAA 353

SEQ ID NO:1978

00790

2153480

LENGTH:351

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02255

SEQUENCE DESCRIPTION:

GATCTNACCT GAGGTGCTGG GTGAGAAATC TTAGGGACCA GATGGAAGAG GGCCTGTNTA 60  
TANNGACATT AGGAAGGAGG TTTGGGAAGG TTTGGGAGGG CAGCCTGACT TGTCTCCAGA 120  
GAAAGTTAGA ACTGGTGTAC TTAGCAACCA AGGGNCACTG GGTCAAAGAC GAGGANTCAG 180  
GACGTCGGTG CCTAGTGAET GAGCGCCANC CAGCCCATT CTNTACATTG CCATGGGCTA 240  
AACCCAGTGT GCTGTAAACT CTTGCAGTTC CTTGNNGTTA TGGGATTTG NTATCTTGNC 300  
NGTGTTCCT CAANTAAAGG NNCTTGTTG TAAAAATTGG GNAANAAGAA A 351

SEQ ID NO:1979

LENGTH:342

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02256

SEQUENCE DESCRIPTION:

GATCTGTTTC CTACAGACTT CAAATTGAC ACCCCAGTGG ACAAACTACC ACAGCTATAA 60  
ATTGAGGCAG CTAACGTCAA ATTCTTGAAT ACAAAACTTT GCCTGTGTA CATAAGCCTAT 120  
ACAAAATGCT GGGTGAGCC TTCATGAGG AAAAACAAAA GACATGGTAC GCATTCCAGG 180  
GCTGAATACT ATTGCTTGGC ATNNNGTATG TATATACTAG TGAAACATAT TTAATGATT 240  
AAATTCTTA TCAAATTCT TTTGTAGCAA TCTAGGAAAC TGTATTTGG AAGATATTTG 300  
AAATTATGTA ATTCTTGAAT AAAACATTTC TCAAACACTCA AA 342

SEQ ID NO:1980

LENGTH:340

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02257

SEQUENCE DESCRIPTION:

GATCAGCATG ACCAGCACTC GTTGGNGGAA AGGTGTCTNT NAGGAGACGT CTGGAGCTTA 60  
TGAGAAACA GATACTGATG GGAAGTTCT CTATCACAAA TCCAATGGA ACATAACCAT 120  
GGCGTCCTAT GTGGTCCACA CCAACTATGA TGAGTATGCC ATTTCCCTGA CCAAGAAATT 180  
CAGCCGCCAT CATNGACCCA CCATTACTGC GGTGTCCCTG GTGATGGNGA TGAGGAGCTN 240  
CTGCGCTTCT CCAACTGACA ACTGGCCGNT CTGCANGTCA GAGGATGGNC AGTGTCTGTC 300  
CNGGGGTACT GTGGCAGNCA GCGACAAGCA ACCTGNCTCN 340

SEQ ID NO:1981

LENGTH:339

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02258

SEQUENCE DESCRIPTION:

GATCNTNTCG NCTCTGAAGA AGACATGGTG ACTGTGGTGG AGGACTGGAT GANNTTCTAC 60

00791

2153480

ATCAACTATT ACAGGCAGCA GGTGACAGGG GAGCCCCAAG AGCGAGACAA GGCTCTGCAG 120  
GAGCTTCGGC AAGAGCTGAA CACTCTGGCC AACCCTTCC TGGCCAAGTA CAGGGACTTC 180  
CTGAAGTCTC ATGAGCTCCC GAGTCACCCA CCGCCCTCCT CCTAGCTCAG GGACCCAGCC 240  
CCTCCCTCT GAGAAACTCT GACCTTCATG TCCTTAGGCT GTGCTCTGC CACTCTACCC 300  
TGACACCTCA ATAAGACCA GTGCTGGTT TGTTGGAAA 339

SEQ ID NO:1982

LENGTH:334

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02259

SEQUENCE DESCRIPTION:

GATCCTTNCG TGCTGAATAT CTGAAAAGAG AAATTTTCC TACAAAATCT CTTGGGTCAA 60  
GAAAGTTCTA GAATTTNAAT TGATAAACAT GGTGGGTTGG CTNAGGGNAA GAGTATATGA 120  
GGAACCTTTT AAACGACAAC AATACTGCTA GCTTCAGGA TGATTTAA AAAATAGATT 180  
CAAATGTGTT ATCCTCTCTC TGAAACGCTT CCTATAACTC GAGTTTATAG GGGAAAGAAAA 240  
AGCTATTGTT TACAATTATA TCACCATTAA GGCAACTGCT ACACCCTGCT TTGTATTCTG 300  
GGCTAAGATN CATAAAAAAC TAGCTGCNCT TAAA 334

SEQ ID NO:1983

LENGTH:332

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02260

SEQUENCE DESCRIPTION:

GATCTTGTGC CAAGCTNAGG GTGTAGCGCT GCAAACGATG AAGCAAGAGT TTCTCATTAA 60  
CCTTGTGAAG CAAAAGCCAC AAATAACANA GGAACAACCTT GAGGCTGTCA TTGCANATT 120  
CTCAGGCTNT TGGAGAAATG CTGCCAAGGC AGGACAGGAG TCTGCTTGT GAGAGGGCAA 180  
AAACTGATTT CAAAAACTCG CCTGCTTGG GNNTTAAATT ACTTCAGGGN AGANAGCAAA 240  
CAGNNCTTC ATTGGTGTN ACTTTCTCT NNAAATTAA CTNNNTAAC ACTTTTGTC 300  
GATTAATGNA ATGATAAACG CTTTATCGC NN 332

SEQ ID NO:1984

LENGTH:331

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02261

SEQUENCE DESCRIPTION:

GATCCTGTGT GTGTGTACTA CCATAGAATG GGCCCCAAGA TGATGATNA AGTGAGGAAA 60  
AAAGCCCCATG GTATCCTAAT GTTGGATG GAGAAAGTGT GTAGATGTAT GTGTGTGCAT 120  
ATGTTTCAC ACAGACGTAT ACACGTGTAT ATCATATGTC CACCTGCATA TGCTCTAGGAT 180  
GTCTCTGGGA GGATATCTAG CAGCCCGGCA GCCTGAATTG CCTCTGGGAA GAGGGGTGGG 240  
AATGACTTTT CAATGTACAC CTTTGTACC TTTGAATT TCCTACCATG TACATGTATT 300  
ATCTATTAAA AAATAGTTCT TAATTTTAA A 331

00792

**2153480**

SEQ ID NO:1985

LENGTH:326

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02262

SEQUENCE DESCRIPTION:

GATCACCCGG CAAGTCAGG CTGAATTCTG AAGGCAAACT TGAGCAGACG GTCTCCATGG 60  
CAACCCGAGC TTCAGAGGCC GAGGATGCCT CCCTTCTAG CTTCATGCAG GGCTACATGA 120  
AGCACGCCAC CAAGACCGCC AAGGATGCAC TGAGCAGCGT GCAGGGAGTCC CAGGTGGCCC 180  
AGCAGGCCAG GGGCTGGGTG ACCGATGGCT TCAGTTCCCT GAAAGACTAC TGGAGCACCG 240  
TTAAGGACAA GTTCTCTGAG TTCTGGGATT TGGACCTGA GGTCAGACCA ACTTCAGCCG 300  
TGGCTGCCTG AGGACCTCAA TACCCN 326

SEQ ID NO:1986

LENGTH:321

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02263

SEQUENCE DESCRIPTION:

GATCCTTACA TCTGCATCTA GTTATCAGTA ATTTAGATAT TGAGCTATT TGATTTATAT 60  
TTAACAAAATT AATAACATTAG CACTGAAAGT TAAATAGTGT GTTTAAGGTA GTTAATTCA 120  
GGTTGAATGG GTTTTTTTA ATGAAGTGT AATAATACCA ATGTATAAGN GTATATTATN 180  
ATATTAATAA TTATAGAAA AAGGAATGTG TGGTATTTNC TNCAGCAAAA CTATTTTGT 240  
GATNTTTNA TTCTCANCTT TNTATTTAAA AAATGTTACA TCTGCAGAAA AGTTGAAAGT 300  
ATAATAAACT CTTCAAGTTAA A 321

SEQ ID NO:1987

LENGTH:321

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02264

SEQUENCE DESCRIPTION:

GATCTGCGCT GTGGCTGTCC CTGGACGTGC TGCAGCCCTC CTGTCCTTC CCCCCAGTCA 60  
GTATTACCCT GTGAAGCCCC TTCCCTCCTT TATTATTCA GAGGGCTGGG GGGGCTCCCT 120  
GGTTCTNAGC ATCATCCTT CCCCTCCCCCT CTCTTCCTCC CCTCTGCACT TTGTTACTT 180  
GTTTGACACA GACGTGGGCC TGGGCCTTCT CAGCAGCCGC CTTCTAGTTG GGGGCTAGTC 240  
GCCGAATTCT ACAATCCCGC TGGGGCGGCC GGGGCAGGAG AGAAAGGTGG TGCTGCAGTG 300  
GTGGCCCTGG GGGGCCATTC N 321

SEQ ID NO:1988

LENGTH:315

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02266

SEQUENCE DESCRIPTION:

**00793**

**2153480**

GATCAAAAT TTCTATCTGG AGAACCTCTG CGGACAAACC GAGTGCTTCC TGCAATTCCA 60  
AGTCACGAA GACACAGCAC AGCAGCAGAA GAGAGTGAAC ATTCTGCCAA CCCCACCAGT 120  
GATGAAAATT AACTGTGGC CACTCGCTGC AGAAATGTAG ATGAATATGT ATTTCAACT 180  
CTCAAAGGAC AAGATTACTC CAGTTGTAA GAACGAAGAC CAATTAGTA AGCTGCATTC 240  
TATAAGCCAT CAGTTTATA ACTCGAAATT CTTTATTCCA AATAAAGATA CTCCCTAAAT 300  
AAGCACTTAG ANAAA 315

SEQ ID NO:1989

LENGTH:312

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02268

SEQUENCE DESCRIPTION:

GATCAAAGCT GGGGCTGGAG GGTGGAGGTG TCAAGCCAGG CCAGGCAAAG GGAGATTTGA 60  
AGCCAGAGCA GGTGGCGCA TCTCCCAGGA AACCCCTGCAT CATTCTTCC TGGTGATTCT 120  
TTCCTCTTT GTTATGGTTC ACATGAGTCT ATGGAGTGCT CATTCTACAT TCTCCGTTCT 180  
TATCTTCATC CTATGCAACT TTAGACCGCT ACTGTTTTT AAAAGTGATT TGATTTGNNG 240  
CTGTAACCTT TTTTATTGT TGTTAGCTT GACTTTGAAA TGTGTAATAA AGATTCAAGT 300  
GAGCATTAGA AA 312

**00794**

**2153480**

SEQ ID NO:1990

LENGTH:310

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02269

SEQUENCE DESCRIPTION:

GATCTGGGG TCCCCGACG ACGTGCTCGA GTTCCTGAAG GTGTATGAGA AGCACTCNGC 60  
CCAGTGAGCA CCTGCCCTGC CTGCATCTGG AGAATTGCCT CTACCTGGAC CTTTGTCTC 120  
ACACAGCAGT ACCCTGACCT GCTGTGCACC TTACATTCCCT AGAGAGCAGA AATAAAAAGC 180  
ATGACTATTT CCACCATCAA ATGCTGTAGA ATGCTTGGCA CTCCCTAACCC AAATGCTGTC 240  
TCCATAATGC CACTGGTGTT AAGATATATT TTGAGTGGAT GGAGGAGAAA TAAACTTATT 300  
CCTCCTTAAA 310

SEQ ID NO:1991

LENGTH:305

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02270

SEQUENCE DESCRIPTION:

GATCCGAGTG AATGCAGTAA ACCCCCACAGT GGTGATGACG TCCATGGGCC AGGCCACCTG 60  
GAGTGACCCC CACAAGGCCA AGACTATGCT GAACCGAACATC CCACTTGGCA AGTTTGTGA 120  
GGTAGAGCAC GTGGTGAACG CCATCCTCTT TCTGCTGAGT GACCGAAGTG GCATGACCAC 180  
GGGTTCCACT TTGCCGNTGG AAGGGGGCTT CTGGGCCTGC TGAGCTCCCT CCACACACCT 240  
NAAGCCCCAT GGGCGTGCTC ATCCTACCCCC CAATCCNTCC AATAAACCTG ATTCTGCTGG 300  
CCAAA 305

SEQ ID NO:1992

LENGTH:301

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02271

SEQUENCE DESCRIPTION:

GATCGAGACA CGTGATGGGA AGCTGGTGTC TGAGTCCTCT GACGTCTGC CCAAGTGAAC 60  
AGCTGCGGCA GCCCTCCCAG CCTACCCCTC CTGCGCTGCC CCAGNNNCTG GGAAGGGAGGC 120  
CGCTATGCAG GGTAGCACTG GGAACAGGAG ACCCACCTGA GGCTCAGCCC TAGCCCTCAG 180  
CCCACCTGGG GAGTTACTA CCTGGGGACC CCCCTGCCCT ATGCNTCCAG CTACAAAACA 240  
ATTCAATTGC TTTTTTTTT TGGTCCAAAN TAAAACNTCA GTTAGCTNTG CCAATTNAA 300  
A 301

SEQ ID NO:1993

LENGTH:311

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02272

**00795**

**2153480**

**SEQUENCE DESCRIPTION:**

GATCTGAACT CCAGCTGCC CACAAACTCC GTCACAGC TTNTTCTCAC TTCATGTGAA 60  
AACTACCCA GTGGCTGACT GAATTGCTGA CCCTCAAGC TCTGCTTA TCCATTACCT 120  
TAAAGCAGTC ATTCCTTAGT AAAGTTCCA ACAAAATAGAA ATTAATGAAT AAATGTTGAC 180  
ACTTTGATAG CACTGATATG GAGATTATCC TTTCATGAG CCTTTATCC TCTGGTCTTC 240  
TTTGAAGAAC CCCTCACTGT CACCTTCCTG AGAATACTCT AAGACCAATA AATACTTCAG 300  
TATTCAGAA A 311

**SEQ ID NO:1994**

**LENGTH:297**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02274**

**SEQUENCE DESCRIPTION:**

GATCTAAAAC TNAAGAACAA ATTCTATTAA TTTATTATTG GAAAATNAAA AGCAACTCAA 60  
AACAACTTCA ACCTGGAGGT GCATTTATAA TTCAATTCTGC ATTTATTCTG TAAAAAGGTG 120  
ACTGTTTTAT AAATNCTTT AATTATGTT CAATATATAT AAAAAGTGCA TCTNTTTNT 180  
TTTCCCTTT TTTCTCCATA ATTTAAGAA ATGAATNNGN TTGTTGTCAA CACATTGTG 240  
AAGTCTTGTG CTATAAAGGG GAACTCCCC TAATAAAAGG GCCTTGGAAA CCTCAA 297

**SEQ ID NO:1995**

**LENGTH:293**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02275**

**SEQUENCE DESCRIPTION:**

GATCTAGGAG AGCGGGCTCT GAACGATTAC CTGGGGTCA AGACAGTNAC CTTCGAATAC 60  
TGAAGAAAGG TCTTTTAAG AAGAAAGTCC CTGCCCCCTCC CTCGTGGCTG GGGCCCCCTC 120  
CCTNTTAAGC CTGGNTGCAC AGCACCTCCC ACCTGGGGGG CTAGTGGAAAG CCCTCCTGCN 180  
TGCACACCACAT GTTGCNTCT TGGACGCCCT CTTCCAGTN ANAAGCAGCC CTTGGNTGGN 240  
TNAGGTGTGC CCCTCCCAGG NAGAATAAAAG CTTCTAAAGA NAGACCGTCC AAA 293

**SEQ ID NO:1996**

**LENGTH:290**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02276**

**SEQUENCE DESCRIPTION:**

GATCAGGAGG AAGTGAGCAG TCGCCTGCCT GCAGCAGGNA GCTTTCTACT CCTGCCTCAT 60  
GCGTACGTCC CACAAATGCA GGTGTCTGA GCACCAACACC CAGTGGAAAG AGTGTGGGGG 120  
AGGCGCACAG TGTGAGCCCG CCCCCACGTC GTGGGTTAAC ATCTGTTATC AACTGCTGT 180  
CGTTGTTGTG GGTTGGTCC TTGAACAAGA TGTGGGCCTT GCAAGATGGG AGAGTAAACC 240  
TTGAAGGGCT TTATTAAGA AATAAAAAAG NACTTNTTGT ATCTTTAAA 290

**SEQ ID NO:1997**

**00796**

LENGTH:289

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02277

## SEQUENCE DESCRIPTION:

GATCCTGAAG AGGATGGTGT GGGATGCAC TTTGAGAAAT GNCTATCTAA CCTTNNGAAA 60  
 CTTAAAGTGT TCCCACTCCC CATTATACTT TTTAAACCA CAATAGTCAC ATAAGGAAAT 120  
 AATCTAGCAG CTCATCCCTT TGCATCCAAT GTTGAACTA TTTTAGAAA GTGCTCTNGT 180  
 TCTGTCAAAG AACCTTCAAC ACAGAAAAAT ACANAAATGTA GGGAAATGTA TAATTCCCTGC 240  
 AGGAGAGAAG TGTTGTTAAC ATGTCAATAN ATGTTCTTAG ANAGTTAAA 289

SEQ ID NO:1998

LENGTH:279

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02278

## SEQUENCE DESCRIPTION:

GATCAGAGAA GCTAGGAGAG CTCCAGCAGG GGCACAGAGG ATTGGNNGCA GGAGGGAGTCT 60  
 GGAACACAGC CTTCATGCC CCGACCCCCA GGCGCACCC CCCCCACACCC TAGGGTACCC 120  
 CAGTCGTATC CTCTGTCCGC ATGTGTGGCC AGGTCTGACA AACACCTGTA GATGACTGNT 180  
 GGCCNAACCT GGGNCCTGNN CAGGAGGTTG GAGCAGNAAG GGCTCCCT AGGGGTGGTG 240  
 TNTCTCCCTCT AGGGTATTGG GNTGCATGTN NTGCACTNN 279

SEQ ID NO:1999

LENGTH:274

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02279

## SEQUENCE DESCRIPTION:

GATCATGAAG GAACACATAG CACCAAGAGA GGCCATGCTA AATCTGCCCT TGTCAGAGGT 60  
 ATCCACACTT CTCCCTGGG GAAGNCTTCC CTGTCCCCCT TGCATTTCT TCTTAACTCT 120  
 CTGTTACACG TCATTGAAAC TACACTTTT TGGTCTNTT TTNTGCTAGA CTGTAAGTTC 180  
 CTTGGGNCA GGGCCTTGN CTGNCTCATC TCTGTATTCC CAAATGCCCTA ACAGTACAGA 240  
 GCCATGACTC AATAAATACA TGNTAAATGG NAAA 274

SEQ ID NO:2000

LENGTH:280

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02280

## SEQUENCE DESCRIPTION:

GATCTTAACA AAATTCGTAG CAGTGGAAACC TTGAAATGCA TGTGGCTAGA TTTATGCTAA 60  
 AATGATTCTC AGTTAGCATT TTAGTAACAC TTCAAAGGTT TTTTTTGTT TGTTTCTAG 120  
 ACTTAATAAA AGCTTAGGAT TAATTAGAAG AAGCAATCTA GTTAAATTTC CCATTGTAT 180  
 TTNATTNCT TGAATACTTT TTNCATAGTT ATTTGTTAA AANGATTAA AAATCATTC 240

2153480

ACTTGGTCA GAAAATAAT AAATATATCT NATAAACAAA

280

SEQ ID NO:2001

LENGTH:271

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02281

SEQUENCE DESCRIPTION:

GATCTGCATG TTCTCTCTT GGGTCAGC ATTCCTTAC AGAAGAGCCA CCGTGGAAAGT 60  
CATGGTAA TATGTGTTGA ATTGGTAAC CCCTCTTGG GAATTCTTG TGAATTACAC 120  
AGCAATAGGG GAACTCATTT AACTGGAGAC ATAATCTCAA TTTGAAAGT GTGGCCATT 180  
TTCTAACATT TTNANNTTGC ATACCCTCCC CTCTCTTCTC GATTGATGAA ACTAACAAAG 240  
AGGTTAATAA AACCCCATCT CGTCATGTAA A 271

SEQ ID NO:2002

LENGTH:270

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02282

SEQUENCE DESCRIPTION:

GATCTTACCC GTGACAAAT GTGTTCCATG GTCAAAAAAT GGCAGACAAT GATTGAAGCT 60  
CACGTGATG TCAAGACTAC CGATGGTTAC TTGCTTCGTC TGCCCTGTGT TGGTTTACT 120  
AAAAAACGCA NCAATCAGAT ACGGAAGACC TCTTATGCTC AGCACCCNCA AGGTNCGN 180  
AATNCGGGAG AAGATGATGG GNAATCATTG GCCCGTGAG GGTTCAAGGC AAANTTGCT 240  
TTTGAANGNA AGGGGGNNNA ATAAATTNGN 270

SEQ ID NO:2003

LENGTH:265

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02283

SEQUENCE DESCRIPTION:

GATCCAACA GAAGAACATC GGAGACCAGA GAGAGGAAC CAAAGGGCG CTGCCCTCCGG 60  
GTCTGGGTC CTGGCCTGCG TGGCCTNTTG GCACGTGTT CTCTCCCCG CCCGGCCTCC 120  
AGTTGTGTC TCTCACACAG GCTTCCTCT CGACCGGCAG GGGCTGGCTG GCTTGCAGGC 180  
CACGAGNGTN GGCTCTACCC NACACTGGCT TTGCTGTGA TACGCTTNTT GCCCTAAAT 240  
AAATATGCAC ATTTATCCA TAAA 265

SEQ ID NO:2004

LENGTH:249

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02285

SEQUENCE DESCRIPTION:

GATCCACATT GTTAGGTGCT GACCTAGACA GAGATGAAC GAGGTCTTG TTTGTTTG 60

00798

TTCATAATAC AAAGGTGCTA ATTAATAGTA TTTCAGATAC TTGAAGAATG TTGATGGTGC 120  
 TAGAAGAATT TGAGAAAGAAA TACTCCTGTA TTGAGTTGTA TCGTGTGGTG TATTTTTAA 180  
 AAAATTGAT TTAGCATTCA TATTTCCAT CTTATCCCCA ATTAAAAGTA TGCAGATTAT 240  
 TTGCCAAA 249

SEQ ID NO:2005

LENGTH:242

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02287

SEQUENCE DESCRIPTION:

GATCAGGAGC AAACAGACCC TGCAAGGTCC TCCAGGCTG GGGACAGGAA AGCCACTGAC 60  
 CCAGCCCCGGG AGGCAGAACCC AGGCAGCCTC CNTGGCCCCA GGCAGCCCTT TTCCCTCCAG 120  
 TGGCACCTCC TGAAAACAGT CCACTTGGC GCAAAACCCA GTGCCTTCCA AATGAGCTGC 180  
 AGTCCCAGG CCATGAGCCT CCCGGGAATG TTTAATAAAG GGCCTGGCCA CCTCTCCTCA 240  
 AA 242

SEQ ID NO:2006

LENGTH:239

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02288

SEQUENCE DESCRIPTION:

GATCTAAGTT TGATAAGAGC CTGTGTGGTG AGTATGGTGT GTATGTGAAG GTGACTTCCA 60  
 TCCAGGACTG GGTTCAGAACG CCATAGCTGA GACTAATGCA AGGCTGGCGA AGCCTTGCTG 120  
 AAAGAAGATT TCAGCTGGAG AGGCAAAGTG GCGGGAGTGG CAGACTGGTG CGTAAGTGTG 180  
 GTTAAGTNTG GGTCCANCCT GCATTCTGAG CAATCAATAA AGTNTTTCTT TTNCCAAA 239

SEQ ID NO:2007

LENGTH:238

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02289

SEQUENCE DESCRIPTION:

GATCCTGAAG GTAATACAAT CAGCAACATT AAAACATTTC TTTCATTTTC TGTTACTGAA 60  
 GTAAAATAAG CATTCCACAT TTATAAACAA CAGGTTATT CAGGAAGATA TTTCATATC 120  
 TTACAGCGAA AAGTCTTTTC AAACAGAACG ACCTAATATT TAATATATTA TTTTGAAAT 180  
 TATTGACTAA CAAAATGATG ACTCGACTGG CGAAATAAAA TACAGTTTT AAATCAA 238

SEQ ID NO:2008

LENGTH:236

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02290

SEQUENCE DESCRIPTION:

2153480

GATCCTGAGA NCTTCAGCT CCTGGNNAAT GTNCTGGTGA CCGTTTGGC AATCCATTTC 60  
GGCAAAGAAT TCACCCCTGA GGTGCAGGCT TCCCTGGCAGA AGATGGTGAC TGGAGTGGCC 120  
AGTNCCCTGT CCTCCAGATA CCAC TGAGCT CACTGCCCAT NATGCAGAGC TTTCAAGGAT 180  
AGGCTTTATT CTGCAAGCAA TCAAATAATA AATNTATTCT GCTANGNNAA AACAAA 236

SEQ ID NO:2009

LENGTH:235

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02291

SEQUENCE DESCRIPTION:

GATCATTACC ATTACAGGAA CACAGGACCA GATACAGAAT GCACAGTATT TGCTGCAGAA 60  
CA GTGGAAG CAGTATGCAG ATGTTGAAGG ATTCTAATGC AAGATATTTT TCCCTTTTA 120  
TAGTGTGAAG CAGTATTCTG GAAAGTTTT CTAAGACTAG TGAAGAACTG AAGGAGTCCT 180  
GCATCTTTN NNGTTAACN TGCTTCTGTT NAAAANGCCA NCATTCCCTCT GTTTN 235

SEQ ID NO:2010

LENGTH:233

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02292

SEQUENCE DESCRIPTION:

GATCCTGAAG AACTTCAAGC TCCTGGAAA TATGCTGGTG ACCGTTTGG CAANNNGTT 60  
CGGCAAAGAN TTCACCCCTG AGGTGCAGGC TTCCCTGGCAG AAGATGGTGA CTGGAGTGGC 120  
CA GTGCCCTG TCCTCCANAT ACCACTGAGC TCACTGCCCA TAATGCAGAG CTTTCAAGGA 180  
TAGGCTTTAT NCTGCAAGCA ATACAAATAA TAANTCTNTC CTCCTAAGAG AAA 233

SEQ ID NO:2011

LENGTH:229

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02293

SEQUENCE DESCRIPTION:

GATCCTTGAC GAGGAGAGAG AGCTTGAAAA GCTGTTTCAG CTGGGCCCCG CTTCACCTGT 60  
GAAGATGCC TCTCCACCAT GGGAAATCCAA TCTGTTGCAG TCTCCTTCAA GCATTCTGTC 120  
GACCCCTGGAT GTTGAATTGC CACCTGTTG CTGTGACATA GATATTTAAA TTTCTTAGTG 180  
CTTCAGAGTT TGTGTGTATT TGTATTAATA AAGCATTCTT TAACAGAAA 229

SEQ ID NO:2012

LENGTH:223

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02294

SEQUENCE DESCRIPTION:

GATCTGGCAT AAATAAATTN AATAAATATT TTAATGCTCC ATTTTTAAT GTTGCTTTTC 60

00800

2153480

ATACTAAAGA ATGGTGTAGA CTTGTTTGCA AACTNTAAGG TACCCAGTTA TCAATTAAAT 120  
CAATGTTTA GAGNAGGAAA TNATTTTN GGTAGAAATT GTTCANGAAC CTTAATTGAA 180  
TGCATTAAT GATGGTGGCA AAATAAACCT ATTAGAAATT AAA 223

SEQ ID NO:2013

LENGTH:221

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02295

SEQUENCE DESCRIPTION:

GATCAATGCC CTCATCTGCA ATGTAGGGC CGGTGGACCT GCTCCAGCAG CTGGTGCCTGC 60  
ACCANAGGAG GTCCTGCCCC CTCCACTNCT GCTGCTCCAG CTGAGGAGAA GAAAGTGGAA 120  
GCAAAGAAAG AAGAATCCGA GGAGTCTGAT GATGACATGG GCTTGGTCT TTTGACTAA 180  
ACCTCTTTA TAACATGTTC AATAAAAAGC TGAACTTAA A 221

SEQ ID NO:2014

LENGTH:219

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02296

SEQUENCE DESCRIPTION:

GATCTGTAGT GTCATGGGTG CTGCCGAGA CGNAAGTTGA NCTGGGGTG CCTGCAGCCT 60  
TCCACTCCTG CCCCGCCTCA CCCCCACATGC TCCCTGTTTC TAATGTTTC TCTAACTTCC 120  
TCACCCCTTA ACCAAAAAAGG TGTGTTNCT TTTGTNCATA TAGCCATTCT NAAATATNAG 180  
TAATGTAAAC CTNACTTTAT TAAAAAATTA TCCAGCAAA 219

SEQ ID NO:2015

LENGTH:216

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02297

SEQUENCE DESCRIPTION:

GATCAGGTTT GTTAGGTTTT TTAGCCTAAT TCCAAAGCAT GGAAGAGTGC TCTAGGTAGG 60  
AAAGAAAGCT TTTCTTACG ATTTGTAGCT ACCTACTGTG CCTGACTTGG TGCCCTGTGTG 120  
AGGATAAAGC CCTTAGTCTG CTCTGCAAT TATTCAAATG ACAAAATAAA TTTGCTTTG 180  
TAATAACAAT AAAAGTTGTC ATCTTCCCTT TTGAAA 216

SEQ ID NO:2016

LENGTH:210

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02298

SEQUENCE DESCRIPTION:

GATCCTGCCA TCACTGCTGC AAAGAGAAC ACGAGACTCAA GGAAACTCCT CCTCCACCGC 60  
AGCCCAACTG TGCCTGCTAG TNTCCCGTG CACACAGGCA GCTCCAGGGG GCTCTGGTTG 120

00801

CCAACAAACA GCATTTGTAATGGTCTATT AGCCTTCATT TATACTGCCT AACATTATT 180  
 TGAAGGAATA AATTGATGTC AATGGCTAAA 210

SEQ ID NO:2017

LENGTH:219

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02299

SEQUENCE DESCRIPTION:

GATCTAGCCT GATTCTGCG TGTCCGAAAG AACTAACGT TTTAAGGT ATTGTNAAGT 60  
 AACTGTGTGG GGTCTAATG CCAGTTCCCT AATTCCATCT CACTGGAGAT GTTTAAAGTT 120  
 GCCCTCTATC CTAATGACTC AAAACTTGGT TCTTAACTAC CATGATTGCT TTTNAGGCC 180  
 CGGAATTATA AATATATATN ATATTAANT TGTTGAAA 219

SEQ ID NO:2018

LENGTH:208

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02300

SEQUENCE DESCRIPTION:

GATCCGGGGC ACAAAAGAGGG TGGGGAACAT GGGGGCTATA CTGGGGAAAG CAGCCATGCT 60  
 CCCCCCNACC TCCAGCCGAG CATCCTTCAT NAGCCTGCAG AACTGCTTTC CTATGTTAC 120  
 CCAGGGGACC TCCTTCANA TGAACGGGA AGAGATGAAA TGTTTTCCA TATTTAAATA 180  
 AATAAGAACCA TAAAAAGCA ACCCCAAA 208

SEQ ID NO:2019

LENGTH:202

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02301

SEQUENCE DESCRIPTION:

GATCTCAAGG CTGCCGTACT GGAGGCCATG ACTGCCTTCC GCAGAGCAGG TGCTGACATC 60  
 ATCATCACCN ACTACACACC GCAGCTGCTG CAGTGGCTGA AGGAGGAATG ATGGAGACAG 120  
 TGCCAGGGCCC AAGAACTAGA ACTTTAAAC GTTCCGGGG CCTCAGACAA GTGAAAACCA 180  
 AAGTAAATGC TGCTTTAGA AA 202

SEQ ID NO:2020

LENGTH:224

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02302

SEQUENCE DESCRIPTION:

GATCTCTTT GAGAACAGGC AGGCTGTGGC CATGTAGCCC CATCACACTG TGTTTGNT 60  
 TGTCTGTGTG TCTGTCTCCC CCACCAGACT GTGAGCTCCA TGAGGGCAGG GACCGTGTCT 120  
 TGTCCGTTCT CTGTATCCCC AGTGCTTGGA ACAGAGCGAG TGCTCACTGT GTATTTAATA 180

AATGGACAAA GAGAGAGGAT GACCCTCACG GGGAGACAGA GAAA

224

SEQ ID NO:2021

LENGTH:195

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02303

SEQUENCE DESCRIPTION:

GATCGGCAAA TGCATTGCC TCCTGGTTAA GCACGTTTG GGGATAATTT TCTCTTCTTT 60  
 AGGCAATGAT TAAGTTAGGC AATTCCAGT ATGTTAAGTA ACACACTTAT TTTGCCTGT 120  
 GTATGGAGAG ATTCAAGAAA TAATTTAAA ACCGCATACA TAATAAAAGA CATTGTTGCA 180  
 TGGCTTATAG TCAA 195

SEQ ID NO:2022

LENGTH:193

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02304

SEQUENCE DESCRIPTION:

GATCTGTGCC GTGGTCCTGA GGCAGTTGTC TCCACACAAG TACCTCTAGA ACAATCCCCT 60  
 TTTTCCATC AAGCTGTAGC CTGCAGAGAA TGGAAACGTG GGAAAGGAAT GGTATGTGGG 120  
 GGAAATGCAT CCCCTCAGAG GACTGAGGCA TAGTCTCTCA TCTGCTATTG AATAAAGACC 180  
 TTCTATCTTAA 193

SEQ ID NO:2023

LENGTH:192

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02305

SEQUENCE DESCRIPTION:

GATCTNCCCT GCATCCTGAC CAAGACCCCA ACCGTGCCCC CAACAGACTC CCCCTGGGAG 60  
 ATTCAAGCTTA TTCACTGATG AGGAAAGTGA AGCCGGGTCT CCTGCTCCC CAAATTCTT 120  
 GCACCTACGA TATAGTCCAG GATTGGGTAG CAAGATTTAA CACAAGCGCT TCAAATTGAT 180  
 GAAAACACAA AA 192

SEQ ID NO:2024

LENGTH:191

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02306

SEQUENCE DESCRIPTION:

GATCCCTAAC TACCAACCCCA CTGAAGGCAG GTACAATGAC ATCACCAAGG TGTACACACA 60  
 AGTGGAGTTT AAGAGATAGA CTTGCAGGCT GCTATCCTTA ACATGCTGCC CCTGAGAGTA 120  
 GGAATGACCA GGGTCAGT CTGCTTCCA CAGAACAGG CATNCTGTTA ATAAATACTG 180  
 GTTTAATCAA A 191

**2153480**

SEQ ID NO:2025

LENGTH:186

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02307

SEQUENCE DESCRIPTION:

GATCGTATT CAGTTTTTG GGTCAATATA TGAACAATGT GTGAACCAGA ACGTATGGTA 60  
TTTGACATCA AAGCTATGTC TTGGCATATG TTTATGTGA TATACTTGAA TTCATTAAA 120  
ATGGAATGTT AATTACATCG ACTTCTTACT ATAAAAAATA AAAAGTTATT GTCCAGTGCA 180  
CAGAAA 186

SEQ ID NO:2026

LENGTH:380

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02308

SEQUENCE DESCRIPTION:

GATCCATTGA GAAAGAGATG ATGTAATAAA TAATTAAGAT TAGTAATAAT ATTATCAGGG 60  
GTGATTATGA CCAGTTGAAT AATCTCTTC CCTTGAATTA TTTAGCTAAC AAATTAACTC 120  
TCCCCAAATAT NTAAANTCAT GTAAANTCAT ATTTNACTGC CCATTATTAA CTAAAATATT 180  
TNTGTNTGAC TTGAGCACC AACTGGTAAT ACTAGTAAT ACCCATGTCA TGCAGATGGC 240  
TGGGCGAATA AGAGATGTCT AAAATATGC ACTGGTCTG GGAAACATGG CACAAGTAAG 300  
GNTATCATAT ATGANGTCTG GTTTATTTA TGCTGATT TGTTTGANT GAGTAGTTNG 360  
GGACTCCANT TCTAAGGNTN 380

SEQ ID NO:2027

LENGTH:183

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02309

SEQUENCE DESCRIPTION:

GATCTCTCCA CAGGGCTTGT TTTCAAAGA AAAGTATTGT TTGGAGGAGC AAAGTTAAAA 60  
GCCTACCTAA GCATATCGTA AAGCTGTTCA AAAATAACTC AGACCCAGTC TTGTGGATGG 120  
AAATGTAGTG CTCGAGTCAC ATTCTGCTTA AAGTTGTAAC AAATACAGAT GAGTTAAAAG 180  
AAA 183

SEQ ID NO:2028

LENGTH:188

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02310

SEQUENCE DESCRIPTION:

GATCTGCAGC TGCCTGGGA CTTGAATCCA TGCAATGTT AGAGTGTGAA GTCAGTTACT 60  
TGTTGATGTT TTCTTACTGT ATCAATGAAA TACATATTGT NATGTCAGTN CTTGCCAGGA 120

**00804**

2153480

ACTTCTAAC AAAATGGAAT TTNNNTTTNC AGTATTCAA TAAATATTGA TATGCCAGC 180  
CTGNTAAA 188

SEQ ID NO:2029

LENGTH:178

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02311

SEQUENCE DESCRIPTION:

GATCCATGCT GATTTTATT GCACAAGAAT TAGGTTGAA CTCTTGAGCT GGAACCTCAG 60  
CAAAGTAGAG TATATATTGT TCAGTATNNC TTTGAAACA TTTCATTAAT GTACTTGTCT 120  
TACANAAATT TCTGAACCTT AGTAAAAAAA AAATAAAGTT AACTTTAA AACTCAAA 178

SEQ ID NO:2030

LENGTH:176

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02312

SEQUENCE DESCRIPTION:

GATCGGTATG TTTGAAAAG AGTAATTAA CTTTGGGTG CCAGGAAATG GGTTTCTCA 60  
AAGTCATTG CCGGCAATGG GCAGGCCTGC AAATACTGGC ACAGAGCATT AATCATAACAC 120  
CTTATTAACG GTGAGGTGAA TAACTTGAA ATAAAGTTT AGAGAAATGT TTCAAA 176

SEQ ID NO:2031

LENGTH:174

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02313

SEQUENCE DESCRIPTION:

GATCCGCCTG GCAGCCATTG CAGAGTCAGG GGTAGAGCGG CAAGTACTTT TGGGAGACCA 60  
GATACCCAAA TTCCGCCATTG CCACTTACCC CGCTGA ATCCTGGAT TCTAGTATGC 120  
AATAAGAGAT GCCCTGTACT GATGAAAAT TTAATAAAGT TTGTACAGA GAAA 174

SEQ ID NO:2032

LENGTH:172

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02314

SEQUENCE DESCRIPTION:

GATCCAGAAG TTATGGTGGC TTTCAGGAT GTGGCTCAGA ACCCAGCAAA TATGTCAAAA 60  
TACCAAGAGCA ACCCAAAGGT TATGAATCTC ATCAGTAAT TNTCAGCCAA ATTTGGAGGT 120  
CAAGCGTAAT GTCCCTCTGA TAAATAAAGC CCTTNCTGAA GGAAAGCAA CN 172

SEQ ID NO:2033

LENGTH:170

00805

**2153480**

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02315

SEQUENCE DESCRIPTION:

GATCTCAGGA CCTCTTTACA CTTTCAAAG TTACTTAAGA CTCTGAAGAG CTTTCCTTA 60  
TGAGGTTATA TCAATATTAA CTACATTAA AATTAAAACA GAAAATTAA AGTAGGTATT 120  
TATTGATTAA TTTAAACAAT AAAATAATA AAGTATTACA TGCTAACAAA 170

SEQ ID NO:2034

LENGTH:169

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02316

SEQUENCE DESCRIPTION:

GATCCGTTG CTGTGAACCC TATGTTATT CCATGTGTCA AGTGGGTCTT GTGTTGCCAG 60  
CTTCTATTG AAGATTGCGT TTGCACTCAG TGTAAGTTTC TGTCAGCAGT AGTTTCACCC 120  
ATTTGCATGG AAAAATTAA AGCTAATAAA GCAATTAAA AAGCACAAA 169

SEQ ID NO:2035

LENGTH:159

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02317

SEQUENCE DESCRIPTION:

GATCCCACAG TCTCAGCCCT GCTTACTAGT GAGAAAGACT GGCAAGGTTT CCTAGAGCTC 60  
TACTTACAGA ACAGCCCTGA GNCCCTGTAAC TATGGGCTCT GAAGGGGGCA GGAGTCAGCA 120  
ATAAAAGCTAT GTCTGATATT TCCTTCACT AATATGAAA 159

SEQ ID NO:2036

LENGTH:151

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02318

SEQUENCE DESCRIPTION:

GATCCGGGN AGCTAGGATG GGGAACCTGC CACAGCCAGA ACTGAGGGGC TGGCCCCAGG 60  
CAGCTCCAG GGGGTAGAAC GGCCCTGTGC TTAAGACACT CCTGCTGCC CGTCTTGAGG 120  
GTGGCGATTA AAGTTGCTTC ACATCNTCAA A 151

SEQ ID NO:2037

LENGTH:148

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02319

SEQUENCE DESCRIPTION:

GATCTAACAT CAAACTAACAA GCTTCAGAA AGGAGACTNT TGNCATCTT TCACCAAGGA 60

**00806**

**2153480**

GTATATTGT AGAGTAATAT ATGTGTGGAA NTTTNAATT ATATCATTG ACATGATTAA 120  
TGAGGCTTAT TTAAGCTGGA GTNNNCCN 148

SEQ ID NO:2038

LENGTH:143

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02321

SEQUENCE DESCRIPTION:

GATCTGGTCT AGTTAACCTA GAAGTATTTT TGTCTCTTAG AAATACTTGT GATTTTATA 60  
ATACAAAAGG GTCTTGACTC TAAATGCAGT TTTAAGAATT GTTTTGAAT TTAAATAAAG 120  
TTACTTGAAT TTCAAACATC AAA 143

SEQ ID NO:2039

LENGTH:142

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02322

SEQUENCE DESCRIPTION:

GATCTGGAGG AGGTGAAGGC CAAGGGACCT GCTTCTATTAA GCCCTTCTCC ATGCCCTGC 60  
CATGCTCTCC AAACCACTTT TTGCAGCTTT CTCTAGTTCA AGTCACCAG ACTCTATAAA 120  
TAAAACCTGA CAGACCATGA AA 142

SEQ ID NO:2040

LENGTH:156

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02323

SEQUENCE DESCRIPTION:

GATCGAAAGA AGAACATCAT GAAAAAANAAA TNAACTTGC TTAGTGGATT AGACTCCTTT 60  
GCTGAAGTCA GTTATTTCATC AAGAATGCAA TTAGACTAAT TGTGAATAAA TGATTGAATG 120  
AAGATATAAT AAATAAAAGC TATAATTATA GATAAA 156

SEQ ID NO:2041

LENGTH:138

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02324

SEQUENCE DESCRIPTION:

GATCTCTCCT TCAGTCTGCT CTGTTAATT CTGCTGTCTG CTCTTCTCTA ATGCTGGTC 60  
CCTAATTGTA CACAGTTAG TGATATCTAG GAGTATAAAG TTGTCGCCCA TCAATAAAA 120  
TCACAAAGTT GGTTAAA 138

SEQ ID NO:2042

LENGTH:137

**00807**

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02325

SEQUENCE DESCRIPTION:

GATCCACAGG CAGAGCCAAG GGAAGGTGT ATTCTNTGAG GAAAGAGTGA TTCTGATATA 60  
TGTACTTGTC ACATTGGTGT TGGACACATT TGCGCCAAAA GTATGGTAAT NCTATTATNA 120  
AATAATTCTC TGAGAAA 137

SEQ ID NO:2043

LENGTH:134

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02326

SEQUENCE DESCRIPTION:

GATCCAAACT GGAANCAGCT CAAATNTCCA TCAATAGCAG AAAGATAAAC AAATGTNGGG 60  
ATGTNCAGAG CTTGAAATAT GACACANTAT AAAAGGACAA ACTATTAAGA CTCACAACAG 120  
CATGGATAAN TCTN 134

SEQ ID NO:2044

LENGTH:133

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02327

SEQUENCE DESCRIPTION:

GATCCAAGCA GGCCCTTGAAT GCAATNGCAA GTGGTTTATA GTCCCTTGCT CTTACAACTT 60  
GCAGGGACAT GTGGTTATTT AGAAATTGTG ACTGAGCGGA CCCAAGAATN TAAATAATAT 120  
TCATAAACCT AAA 133

SEQ ID NO:2045

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02328

SEQUENCE DESCRIPTION:

GATCACCTGT AGGGAAATGA AGTGTNCCCT GGAACAAGGA GGTGGGGGCA NTGTGGCCCC 60  
TTCCCCAACT GGGGGTGGAC AGCTGTNTCC TGGGGTGGGT TGGTATTAAGA GAGGAAAGCN 120  
ATTTTTGGAA AA 132

SEQ ID NO:2046

LENGTH:130

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02329

SEQUENCE DESCRIPTION:

GATCCCAGGA ACTGTGGCA CCCATTTCT GTGTCTCCA GCCCATTCC ACTCCTAGTT 60

00808

2153480

TGTATGGAT AATNTTGTT GTTCCCTGTG TGATTTTGC CATCAAAATA AAAATTGAG 120  
ACTCGTTAAA 130

SEQ ID NO:2047

LENGTH:130

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02330

SEQUENCE DESCRIPTION:

GATCCAAGGT CAAAAAAACA AATNCATCAA TTCAGCACAC CACCACTNA NAGGCTAAGC 60  
ATCTTAATGC TAATTCAATTG ANGCTGCCAT TTGTCAAGTG CCAAATTGAN TTATTGATT 120  
GTCAATANTN 130

SEQ ID NO:2048

LENGTH:130

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02331

SEQUENCE DESCRIPTION:

GATCAGATAT ACAAAAATAA AGTTTTNAT TTCATTAAT ATTAAATTAA AACTGCTAAG 60  
TTTGAAAATT TTTACCAAGA AATANTTTN ANAAATTTN CTAACGTGAT AAAGGCTTT 120  
AAGCAATAAA 130

SEQ ID NO:2049

LENGTH:129

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02332

SEQUENCE DESCRIPTION:

GATCTATATT CCCTTATTGC ATTTCCCTTA TGTATAATT TCCAGATGGT GATGTTACTT 60  
TTCAGTGAC TCATATGTCT CATTTCATC TAAAATTAAA TGGCAGGAAA CAAGGACTGC 120  
ATAGAGAAA 129

SEQ ID NO:2050

LENGTH:129

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02333

SEQUENCE DESCRIPTION:

GATCAAAAGC TTATTCNTTT TTTTTTTT TTCTTTGGTG TAAAGCCAAC ACCCTGTTA 60  
AAANANATAA TTTTTTTAA TCATTTGCN TCTTTTTTT TTGCTTCATT NAATAAAAAN 120  
TGGAAAGAN 129

SEQ ID NO:2051

LENGTH:148

00809

**2153480**

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02334

SEQUENCE DESCRIPTION:

GATCTGAACA CCACAGCCCC TGTACTTGGG TTGCCTCTTG TCCCTGAAC TCGTTGTACC 60  
AGTGCATGGA GAGAAAATT TGTCCTCTTG TCTTAGAGTT GTGTGAAAT CAAGGAAGCC 120  
ATCATTAAT TGTTTATTT CTCTAAA 148

SEQ ID NO:2052

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02336

SEQUENCE DESCRIPTION:

GATCCANCTN TNTCAACCTC CCAAGTAGGA TTACAAGCAT ACGCCGACGA TGCCCAGAAT 60  
CCAGAACCTT GTCTATNACT CTCCCCAAC A CCTAGATGT GAAAACAGAA TAAACTTCAC 120  
CCAGAAAACA AA 132

SEQ ID NO:2053

LENGTH:126

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02337

SEQUENCE DESCRIPTION:

GATCCATCCT TCCTGCCTCC AAGGAGGATA CACAGAGAAT GGCTTCCTGT TGTTTGT 60  
ATTTCTTAA CGTGTACAGA TGGAAACTTC ATTTAAAAAT AAAAACAAAA CAACTCAAAA 120  
AGGAAA 126

SEQ ID NO:2054

LENGTH:126

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02338

SEQUENCE DESCRIPTION:

GATCAAAAAA GCTCACGTCG TATTCTTCT TTTCTTTCT CTTTCTAGA AATTGGGTGT 60  
TTGTACCAAGA ATGGAATTGTT GCTTCTCGGT TATCCTGTGC TTCAGATGAT TATAATCTAA 120  
CCCAAA 126

SEQ ID NO:2055

LENGTH:125

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02339

SEQUENCE DESCRIPTION:

GATCAAATCT TACAGTTCAT CACAGAATCC ATGTTGGTGA TAAATNCTAT AAAAGTAATA 60

**00810**

2153480

GGGGTGGTAA GAACATCAGA GANTCCACAC AGGAAAAAAA ATCTATAAAA NGATTCTTG 120  
TGAAA 125

SEQ ID NO:2056

LENGTH:124

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02340

SEQUENCE DESCRIPTION:

GATCCCACAG AAATGTTTG GAGAGCGGGA GGTTTCCCC AATCTCCTCC AAGTTCTCT 60  
CCCTCCAACC AGAGTTGTGT CTAACTTTAG GCATCTTTA ATAAATNTNA TTGCGACTCT 120  
GAAA 124

SEQ ID NO:2057

LENGTH:207

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02341

SEQUENCE DESCRIPTION:

GATCACTTCT GAATAAGCAG TTTGCCTTA TAAAAACTTG CTGCCTGNCT AAAGATTAAC 60  
AGGTTATAGT TTAAATNTGT ATTAATGCT ACCATCTTCG AATAAAGTGA CAATTGAATG 120  
NAACAGGGTT TTCAAGTTG TATAATTCTC TGAAATACTC AGCTTTGTC ATATGGGTAA 180  
AANTTAAAGA TGTCATTGGN CTACAAA 207

SEQ ID NO:2058

LENGTH:120

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02342

SEQUENCE DESCRIPTION:

GATCTTACT CTTGAGAAAT GAATAAGCTT TCTCTCAGAA ATGCTGTCCC TATACACTAG 60  
ACAAAATGAA GCCTGTATAA GGAATAATG GGAGCGCCGA AAAGCTCCNT AAAAGCAAA 120

SEQ ID NO:2059

LENGTH:119

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02343

SEQUENCE DESCRIPTION:

GATCCAAGGT ATCCNTAACAA NTGGAGCAGC CAAGTTNTT TTCAGGCACA ATGACCTGA 60  
CCACCTAAAG AACTTNTAG AGAAGTNAA CCCTAAGATA CCCAAAATTG TGGCCTTN 119

SEQ ID NO:2060

LENGTH:127

TYPE:nucleic acid

00811

**2153480**

TOPOLOGY:linear

CLONE:HUMGS02345

SEQUENCE DESCRIPTION:

GATCCCTCT TCTCAGACAG CGCCAGGCCG GGGTGGGCC GGGTTGGGG CCGAGCCCCA 60  
CAGCTGCCCC CCTCCCNNTCC CNTTTGTAT AATTAATAA AGAAATGGTC GCGCTTCTGT 120  
TTTTAAA 127

SEQ ID NO:2061

LENGTH:117

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02346

SEQUENCE DESCRIPTION:

GATCGAGGTG GAGAACATGC GGCGGGCGGA GNCTTATNAC CGNNTAGAGA ACAGCCCACA 60  
GNTGGATGGG AGCCCCCAG GGCTCGAGGG TCTGCTGGGG GGCATTGGGG AGAAAGN 117

SEQ ID NO:2062

LENGTH:115

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02347

SEQUENCE DESCRIPTION:

GATCTGCTGA GGACACATGC GCTTTGTAG AATTAACAT CTGGTGTGTT TCTGAAAAAA 60  
TATATATACA TATATTGCTT TATTGAAAC AAATNAAAAT ATGCTGCATT TGAAA 115

SEQ ID NO:2063

LENGTH:114

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02348

SEQUENCE DESCRIPTION:

GATCTGGAGG AGGTGAAGGC CAAGGTGCTG CCCGCTGGC CTCCCAACGG GCCCTCCTCC 60  
CCTCCTGCA CGGCCCTTC CTGGCTTTG AATAAGTCT GAGTGGCGG CAAA 114

SEQ ID NO:2064

LENGTH:114

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02349

SEQUENCE DESCRIPTION:

GATCCAAAGT ATCAGGTCTG TTAGTGGCCA TCAGCACTT AATATTGCCT CGAGGAGGAT 60  
TTCTTGGNCN CNNNAATAA GGTCATTAAG TCTTATGCCA AATTCACTGC TCCN 114

SEQ ID NO:2065

LENGTH:113

**00812**

**2153480**

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02350

SEQUENCE DESCRIPTION:

GATCCTAGAT AAGCAGGTGA ATTTAGGCT TCAGAATATA TCCGAGAGGT GGGGAGGGTC 60  
CCTTCCAAGC TGGTGAAGTC CTGTTCTTAT TATGAATCCA TTCATTCAAG AAA 113

SEQ ID NO:2066

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02351

SEQUENCE DESCRIPTION:

GATCTACGCT GTGCCCTGGC AGGGCACAAT GACCTNTAG ANATCCACCT GTTAGAACGC 60  
CTAGGGGTCT GAACCGGGCT GGNCTGANNC TATCACCTCT TATGCACAN 109

SEQ ID NO:2067

LENGTH:108

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02352

SEQUENCE DESCRIPTION:

GATCCCAAGG CCTAGCCTGT GAAGGTCTCC TATCGGAAGA NTACCCCCAT NNAATGGGAA 60  
GTGGAATTCC TGGTCAANTT GGTCTTNATG CTCTGGAAAGA CGTAAGAN 108

SEQ ID NO:2068

LENGTH:108

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02353

SEQUENCE DESCRIPTION:

GATCTTAAGC AAAAATACTC ACTGAAATAG TATGTGGATG AATTCACCTA CTTACAATT 60  
TATGGTTCT TTGTAAATAA TAAATGTGAA TCTCAATTCT GCTTTAAA 108

SEQ ID NO:2069

LENGTH:104

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02354

SEQUENCE DESCRIPTION:

GATCCTNGGC TCCACCTGGG TGGCCCTGAC CACGGGAGCC TTGGGCCTAG AGCTGCCCT 60  
GTCCCTNCCAG GACCCCCNCC TGGCCACTGC CCGCCTACTN NCTN 104

SEQ ID NO:2070

LENGTH:408

**00813**

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02355

SEQUENCE DESCRIPTION:

GATCAGAGCT GCTGAGTTCA GGATGCCTGC GTGTGGTTA GGTGTTAGCC TTCTTACATG	60
GATGTNAGGA GAGCTGCTGC CCTCTTGGCG TGAGTTGCGT ATTCAAGGCTG CTTTGCTGC	120
CTTTGCCAG AGAGCTGGTT GAAGATGTTT GTAATCGTT TCAGTCCT GCAGGTTCT	180
GTGCCCCGTG GGTGGAAGAG GGCACGACAG TNCANGCGCA NGTTCTGGG CTCCCTAGTC	240
GCAGGGTGG GATGTGAGTC ATGCGGATT A TCCACTCGCC ACAGTTATCA GCTGCCATTG	300
CTCCCTGTCC TGTTCCTTATT TGTGCATTG GTTTGGTTTC CTGTAGTTT	360
AATTTTTAA TAAAGTTGAN TAAAANTATA AAAANAAGAG NNGGCNN	408

SEQ ID NO:2071

LENGTH:101

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02356

SEQUENCE DESCRIPTION:

GATCAAAAGC TTATTCATCT TTTTCTTT TCCTTTGGTG TAAAGCCAAC ACCCTGTTA	60
AAAANCATAA TTTCNTTAAN CNATTTCCC TCTTCTCNT N	101

SEQ ID NO:2072

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02357

SEQUENCE DESCRIPTION:

GATCAAAAAA AGAGTTGAA GCTAATTTG GCAAATTCA GGCAAAAAA GTAAGGCCAT	60
TATTTAACCC TGTGGCACCA TAAATGTTG AAGAATGACA AA	102

SEQ ID NO:2073

LENGTH:95

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02358

SEQUENCE DESCRIPTION:

GATCTTTTT GTCAGTTGT TTGTATGAAA CAAAGCCNT TATTTGTTAA TAGTTCTGC	60
AAAAACAATG AAAAAAACT CAAGGAGCAA CTAAA	95

SEQ ID NO:2074

LENGTH:92

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02359

SEQUENCE DESCRIPTION:

2153480

GATCGTCTCT AGGATGATAT GCATGTTCA AGTGGTATTG AAAGCCGCAC TGATGGATAT 60  
GTAATAATAA ACATATCTGT TATTAATATA AA 92

SEQ ID NO:2075

LENGTH:101

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02360

SEQUENCE DESCRIPTION:

GATCTAAGTT AGGAAAGACG ATGGAGGTGG AACCTTAA GATTATNTCC AGTTATTTGC 60  
TTAATAAAG AAGAAGTTAC CCTTGTCAAA ATCAGAACAA A 101

SEQ ID NO:2076

LENGTH:87

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02361

SEQUENCE DESCRIPTION:

GATCTTCATT TATTTAATG GTAATGGTTT TAAAATATGT TCCTGATTGT ACATATTNTA 60  
AAATAAACAT GTTTTTAAC ATGCAAA 87

SEQ ID NO:2077

LENGTH:88

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02362

SEQUENCE DESCRIPTION:

GATCACAAAC ATTCAACAAA AAAGTTAACT TATGTGACTT GGCAGTTATT CTATACCATT 60  
TCCTGTCCAT TAAAATTTT AAAGGAAA 88

SEQ ID NO:2078

LENGTH:85

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02363

SEQUENCE DESCRIPTION:

GATCCCATTT AATATTTAAA AAAATCAGTA GCACAAATAT ATNTNAATTG TCAACTTACA 60  
AAATAAAATA CATTACAGT CTAAA 85

SEQ ID NO:2079

LENGTH:82

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02364

SEQUENCE DESCRIPTION:

00815

**2153480**

GATCATCAAA AAAGAGGTAA TCTACGTTAT TTCCTATTCT AATGTCTTT CCTAATAAAA 60  
AACTTCAACT TTCTAAGTTA AA 82

SEQ ID NO:2080

LENGTH:80

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02365

SEQUENCE DESCRIPTION:

GATCCTTCG GAATTGCACT TTTACATGTT GGGCGAATTT GTGTCCGTGC TGAAGTTAT 60  
TAAAGGAAAA TAGATGGAAA 80

SEQ ID NO:2081

LENGTH:80

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02366

SEQUENCE DESCRIPTION:

GATCAAGCCT TGCTTGAGAT TGGCCTTACC TCTGGNCNTT TTTTGTATA TGAGCTAATA 60  
AATNCTGTTT ATTGTTAAA 80

SEQ ID NO:2082

LENGTH:80

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02367

SEQUENCE DESCRIPTION:

GATCCATGAA GTNATTCACT GGAAANATGC ACGTTNATAC TATTTNAGAG CACAAATAAA 60  
CTCACTATAC AATGGTCAAA 80

SEQ ID NO:2083

LENGTH:76

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02368

SEQUENCE DESCRIPTION:

GATCAAACCT CAAAGCAGCT TTNACTTGGAA ATTTAAAAAT AAACAGTTCA AAGATACTCT 60  
ACATTATCAC CNTAAA 76

SEQ ID NO:2084

LENGTH:70

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02369

SEQUENCE DESCRIPTION:

**00816**

**2153480**

GATCCATTTC ATGCAGGATT GTGTTGTTT AACTGTTGTT GAGGAAACTA ATAAATAATT 60  
AAATTGTAAA 70

SEQ ID NO:2085

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02370

SEQUENCE DESCRIPTION:

GATCTAAGAT GTCCCAGGTC CTGGGAAGTT TACTCAATAA AGCTGGCTTT CCCCTGCCCT 60  
CAAA 64

SEQ ID NO:2086

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02371

SEQUENCE DESCRIPTION:

GATCCGTTGT AATGATGTGA ACATTTATG AGTTAAATA AAGTCATCTT ATGGTGTCA 60  
TAAA 64

SEQ ID NO:2087

LENGTH:61

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02372

SEQUENCE DESCRIPTION:

GATCTAAAAA TCAGTGATTA TCTTTTCTA AATAAAATAT CACCAGAATT CATCAGTTAA 60  
A 61

SEQ ID NO:2088

LENGTH:60

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02373

SEQUENCE DESCRIPTION:

GATCTAAGAT GTCCCAGGTC CAGGAAGTTT ACTCAATAAA GTGGCTTTCC CTGCCANAAA 60

SEQ ID NO:2089

LENGTH:66

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02374

SEQUENCE DESCRIPTION:

GATCTCCGGG CAGCCACAC CTCCTCGGTC TGCCCCCTCA TTAAAATTCA CGTTCCCACC 60

**00817**

CTGAAA

66

SEQ ID NO:2090

LENGTH:59

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02375

SEQUENCE DESCRIPTION:

GATCATGCAA AGAAAATTC CAAAAAGATT TATTAACCTA AACCAGCCTC TNTNGCAA 59

SEQ ID NO:2091

LENGTH:74

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02376

SEQUENCE DESCRIPTION:

GATCTCAAT TGCTCTGAA CCTTTATAA GACAGTTAT CTTCAAATAA ATTTATTTG 60  
CAATACCACG CAAA 74

SEQ ID NO:2092

LENGTH:56

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02377

SEQUENCE DESCRIPTION:

GATCAAAGTC TATTTGCAT AAAATGTCCA ATAATTAAT ATTGTTATAA AATAAA 56

SEQ ID NO:2093

LENGTH:55

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02378

SEQUENCE DESCRIPTION:

GATCGGCAGT TGGGAGGGGC GCTCTGAGAT TAAAGAGTT TACCTCTGAG ATAAA 55

SEQ ID NO:2094

LENGTH:54

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02379

SEQUENCE DESCRIPTION:

GATCCANTCT TTGACAAACT GAAAAGAACT GAAAATAAAC ATTGCTCTTT CAAA 54

SEQ ID NO:2095

LENGTH:52

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02380

SEQUENCE DESCRIPTION:

GATCCCTGCC CCTCCCCACT GGGACGGAAT AAATGCTCTG CAGACCTGGA AA

52

SEQ ID NO:2096

LENGTH:266

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02382

SEQUENCE DESCRIPTION:

GATCTGCTTA TAGAGCAGGA AGAATAAAGC CACCAACTT TACCTAGCCC GGCTAATCAT 60  
GGAAGTGTGN CCAGGCTTCA AGTAACATTG A GTTTAATT TTTTTTTTC TTGGNAGAGT 120  
AATGAAAAT TAAATGGGG AAAGATATT AANATTAAT ACTAAGCTT AAAAGAAC 180  
CTGCTATCAT TGCTATGTAT CTTGATGCAA AGACTATGAT GTTAATAAAA GAAAGTACAG 240  
ANGACACTTG GCATTCAAAG NTTAA 266

SEQ ID NO:2097

LENGTH:451

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02399

SEQUENCE DESCRIPTION:

GATCTAGAGA GTGCTCAGAA TTAGGGCCTG GCATTTGGAA TCACAGGANA TATCATCACA 60  
GAAACAACTG TTTAAGATT AGTTCCATCA CTCTCATCCT GTATTTNAT AAGAAACACA 120  
AGAGTGCATA CCAGAATTGA ATATACCATA TGGGATTGGN GAAAGACAAA TGTGGAAGAA 180  
ATCANNNGNC TGGAGACTAC TTTGTGCTT TACAAAACGT TGAAGGATTG TGGTCACCTG 240  
GAACAGTCTC CAATCTATGT TAGCACTATG TGGCTCAGCC TCTGTTACCC CTTGGNTTAT 300  
ATATCAACCT GTAAACATGT GCCTGTAACT TACTTCCAAA ATCAAANTCA TACTTATNG 360  
AGGAANATTC TGATTTNTA GANAAAANNT NGAGCNAGGN GATTATANCN TGTGCAAG 420  
TCATGTGGTT TCTTCTCAA TNGGGGNNNA N 451

SEQ ID NO:2098

LENGTH:441

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02400

SEQUENCE DESCRIPTION:

GATCCAAAC TGTTCCCTT TTCATTCTT GAAATGTTAC CACTACAGAC ATTTTTNAA 60  
GGTGAATAAA CAGTTGTNAT GTGCTGTACC TAAAATCATG TTTAATCGTA TAAGGAAACA 120  
TTTCAATACA CTTATACAGG AAGAAAACCA TAGATGAAGT ACATGTGTGT GATTCACT 180  
GATTACACAGA ATTCTGAGAG TAATATGGAA TAAAACAAC CCACCTAGAT GATAACTGAA 240  
GCATTTCTG CCTTGAAAT TTTGGNTT TAAATTGCTG TTAGAATGGG NAATTGGAC 300  
ACTTTATATC ATTGTATANT TNCAGACTTT AGNTTCTGTA TCTNTTGGGA ACCATGGTTA 360

00819

TAGCAAAACC NTTGGNAATA ATCCTGTTTC CNANACCNCC CTNNATGTAACCTGGTATG 420  
 CTTGGCTGGT AACNCCTAAG N 441

SEQ ID NO:2099

LENGTH:440

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02401

SEQUENCE DESCRIPTION:

GATCTATGTC TNCTGCCTGG CTCCTAGATG GCTCTCCGGG CAGGTNCTGG CCAAGGACAT 60  
 CATCTAGGCA GGGGGAGAGC CTGGNCTGAA CAGCTGTNAC CAAAACTCCC TTCTNCCCCA 120  
 CCCTGCCCGC TCCACTTCCT GCCCTCTGTT CCATCTTCCC CCTTCCCAA GGCCACAGCC 180  
 TTTATTCCAG GCCCAGGGAT GTAGGAGGGG GAAGGAGGAA ACAGGAAGCC CAGAGAGGGC 240  
 AAAGGGCCTA CCTCGGGGCG CGAACCATGC CCCANACTAT TATCTCAGGG CTTCTGGGC 300  
 ACTNGCACTT CAGCGTGGCC CACCTGCCA TGCCCTGAGG CCAGTNGCG AGGGGTGGCT 360  
 CCTGAGGGTT TTTATAACCT TTGTTGNTA ATGTTAATT TTTGCATCAT AATTCTACA 420  
 TTGTCCCTGG AGTGTAAAGAN 440

SEQ ID NO:2100

LENGTH:411

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02402

SEQUENCE DESCRIPTION:

GATCAAAAGG CTGAAAGGTT TGCTCACCCA GCACGGCATC CCCTACACGA GGCCCACAGA 60  
 AACTTCAAC TTGGAGCACT TGGGCCACGA GACGCCAGA GCCAAGTCTC CAGAGCAGCT 120  
 GCGGGGTGAC CCAGGACTGC GTGGGAGTT GTGACCTTGT GGTGGGAGAG CAGAGGTGGA 180  
 CGNGGGCGAG AGCCCTACAG AGAAGCTGGC TGGTAGGACC CGCAGGACCA GCTGACCAGG 240  
 CTTGTGCTCA GAGAAGCAGA CAAACAAAG ATTCAAGGTT TTAATTAATT CCCATACTGA 300  
 TAAAAATAAAC TCCATGAATT CTGAAACCA TTGCATAAAAT GCTATAGTGT AAANAAATTT 360  
 AACCAAGTGT TACTTAAAC AGTCGTACA AGTAATGNTT ATAATTCTAA A 411

SEQ ID NO:2101

LENGTH:408

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02403

SEQUENCE DESCRIPTION:

GATCTGGAAA GCTTGAGCCT CTTGGGTTC GTCTACAAAT TGGAAGGAAA TATGAATGAA 60  
 GCCCTGGAGT ACTATGAGCG GCCCTGAGA CTGGCTGCTG ACTTTGAGAA CTCGTGAGA 120  
 CAAGGTCTT AGGCACCCAG ATATCAGCCA CTTTCACATT TCATTTCATT TTATGCTAAC 180  
 ATTTACTAAT CATCTTTCT GCTTACTGTT TTCAGAAACA TTATAATTCA CTGTAATGAT 240  
 GTAATTCTG AATAATAAAAT CTGACAAAAT ATTAGTTGTG TTCAACAATT AGTGAACAG 300  
 AATGTGTGA TGCATGTAAG AANGAGAAAT CATTGTATG AGTGTATGT AGTAGAGAAA 360  
 AAATGTTAGT TAACTTGTAA GGAAATAAAA CATTGGACTT ACACTAAA 408

**2153480**

SEQ ID NO:2102

LENGTH:397

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02404

SEQUENCE DESCRIPTION:

GATCCGAGAG GTGCCAAC AAGTCAAGGT CCCCCCTGCTG GATTTAGGCA GCCCCCAACT 60  
GGCCATGCAC TCTATCCGGN AGATGGCCTG CACCACAGGA GTCCTCCANA CCCTNACCC 120  
CTTCAAGGGC TTCTTTAACG TGTTCCCTTC TCTAAGCCAT AATCTCTNAG TGGATTGAGC 180  
CCTCTGGAA AGACTTCTCT CCCATCCCTT TGCACCTGAN AGGGGAAGTT CTCAGCTGAG 240  
CTGAAGCTGG ATTATTAAG TGGATTGTAAC TCTCAGACTCT CCGTGCTACG CTTATTTGGA 300  
GACTAGAGGA GTGGGAGTTG AGCCTGGCTT GAACCTTGG ACCAGAAAA GTTGGGGAGC 360  
AGGTGGAGGA GGCCACACTC CTGGGAGCTT GATGGTN 397

SEQ ID NO:2103

LENGTH:219

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02406

SEQUENCE DESCRIPTION:

GATCAGCCCT TTTCCCATC CTGCCCTATG GTTCTCTAGC CACCTGTGCA TGCATGTGTA 60  
TTTCTGCCTN GTTCTATGGT GTGTGGATGT GTGTGCATGA ATCTGTCATA TAGAGGGGGT 120  
CCGAGCTGGA ATCCTAGAGC ATTGCTGCC C TGGGGCCTGA TGTTCTTGGC TTCCTCAGAG 180  
CATGTAACAG GAAATTAAT GGGATGAGTG TTTGGTAAA 219

SEQ ID NO:2104

LENGTH:380

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02408

SEQUENCE DESCRIPTION:

GATCCTACCT CCAACTCCTG ACTCTATAGG TCTCACTCTT TTTTATTGT CCTANNNTA 60  
CATAACATAA AATTATAAA TTTAATATTTC TAGGGTATAG TTCAGTGGTA TTAAGTACAT 120  
TCACACTGAT GTGCAACCAT CATTATCATC CATTCCAAA ACTTTTCATC ACCGCAAATA 180  
GAAAAGCTGT ACCCATGAAA CAATAACTTC CATTGCCCTC CCCTCAGCCT TTGGTAACCT 240  
CTATTCTACT TTCGTGTTCT ATGAATTGAGG TGTTCTAGG TACCTCATAT AAGTGGAAATC 300  
ACACAATATT TGCCCTTTG TGTCTAACTT ATTCACTTA GCATGTTTC AAGATTTATC 360  
TGTACTGTAC CATGTATCAN 380

SEQ ID NO:2105

LENGTH:378

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02409

**00821**

**2153480**

**SEQUENCE DESCRIPTION:**

GATCTGTGCT CTCCCTAGCCC AAGAGACCCC TGGAGGGGCT GGAGTTTAT CCAGCGNCTC 60  
GTCGTATGTT TGGCTGAGCA CCTGTGGCCT GGGTGCAGGT TAACTTCTTG TTATCAGGAG 120  
CCCACATATGC AGAGGCCAAA GGTGGCAGC CAGCGAGGCT ATGAATTGGA CCTTTTGGT 180  
ATCTGTGTNA CTGNTCTGTG NCCATNCTTA GNCAACTTGC TGGCGTGACA AGTGGCCACA 240  
AGTAACACAC CAGGTACCCA GAGNAGGGTG GACAGGGAG ACCTGAATNA CAGCAGTANG 300  
GAATTCCCTCA ANGNTGTGNC CTCGCCATG AANTTGTCC AANTTGAAGG TNANNAGGN 360  
CACCAATCAG GGTGAGN 378

**SEQ ID NO:2106**

**LENGTH:374**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02411**

**SEQUENCE DESCRIPTION:**

GATCCAGAAG TACAAGGTGG TCCTGGCCCC GGAGACGGNG GAGTTGAAGA GTGTGGCCCG 60  
CATTGTCCTG GTTCCCAATA AGAAAGTGGG CCTGCAGTTC CTGCAGAGAC AGTGTGAGC 120  
TGAGTCTCCG CCTTGCTGGG GCTTGTCTTA GAGGCTCCAG CTCTGGCACA GTGGTTCCCTG 180  
GCTGCTGCCA TGTCTCANAT GAGGAGGGAG AGAAGGGAGC CGCCAGACTC GAGAGGTGGG 240  
AGGAACCTCCT TGACACACACC CTGAGCTTTT GCCACTTCTA TCATTTTGA GAACTCCCTC 300  
TCAGCTAAAA GGCCACCCCTT TTATCGAATG CTGTCCTTGG GAAGATATAA AATAAAGGGC 360  
TNTTATTTCT TAAA 374

**SEQ ID NO:2107**

**LENGTH:369**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02412**

**SEQUENCE DESCRIPTION:**

GATCCAGCCC GACCTGCGAG ANTGATGGAG ACCATGCACC GCATGAGCCA CCTCCCACCC 60  
GACTTGGAGG GCGGCCAGAC GGTAGGCCAG TGGCTGCAGA CCCTGAGCGG ATGTCGGCGT 120  
CAGATGAGCT GGACGACTCA CAGGTGCGTC AGATGCTGTT CGCCTGGAGT CAGCCTACAN 180  
CGCCTTCANC CGCTTCCTNA TGCTGAGCC CGGGGANTAG CCTTGNACAG CGGGGAGAGT 240  
CTGAGGCNTG GTCTGGTCC CTGTCCGCAN AGAGGCCGTG NNATCACANA GCTANTGTCT 300  
GAGTGGCTGT CTGGNTCTGC TTTGGGTAAG ACTTTGGGCG CGGCCTCCCA NAATAAGGTG 360  
TCTCGAAA 369

**SEQ ID NO:2108**

**LENGTH:368**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS02413**

**SEQUENCE DESCRIPTION:**

GATCAGAGCC AAGAACGTC TGCGGCAGAG TGGGAAAGAG TTGCCGCCAA CCTCCTAGGC 60  
GCCCGCCCA GCTCCCTTG ACCCCCTGGGG CAGGGCAGGG GGCAGGGAGA GACAAGGCTG 120

**00822**

2153480

CTGCTATTAG AGCCCACCT GGAGCCCCAC CTCTGAACCA CCTCCCTACCA GCTGTCCCTC 180  
AGGCTGGGG AAAACAGGTG TTTNATTGT NACCGTTGGA GCTTGGATAT GTNCGTGGCA 240  
TGTGTGTGTN TGTGTNANAG TGTGAATGCA CAGGTGGTA TTTAATCTGT ATTATTCCCC 300  
GTTNTGGAA TTGNNTCCC CNATGGNCT GGGGTACTTT ACATTCATA AATACTGTTT 360  
AACCCAAA 368

SEQ ID NO:2109

LENGTH:368

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02414

SEQUENCE DESCRIPTION:

GATCACAGGA AGTGGGAGGAG CCAGAGGTGC CTTTGTGGAG GACAGCAGTG GCTGCTGGGA 60  
GAGGGCTGTG GAGGAAGGAG CTTCTCGGAG CCCCTCTCA GGCTTACCTG GGCCCTCCT 120  
CTAGAGAAGA GCTCAACTCT CTCACACCT CACCATGGAA AGAAAATAAT TATGAATGCC 180  
ACTGAGGCAC TNAGGCCCTA CCTCATGCCA AACAAAGGGT TCAAGGCTGG GTCTAGCGAG 240  
GATGCTGAA GGAAGGGAGG TATGAGACCG TAGGNANAAN GGCACCATCC TCGTACTGTT 300  
GTCACTATGA GCTTAAGAAA TTTGATACCA TAAAATGGTA AAGACTTGAA AAAAGTANAA 360  
NATGTTN 368

SEQ ID NO:2110

LENGTH:368

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02415

SEQUENCE DESCRIPTION:

GATCTGGTT TTGATGTGGA CATAGGCCCT CTTTCCAGA CTCCTCGTGA AGTGGCCAG 60  
CAGGCTGTGG ATGCGGATGT GCATGCTGTG GGCATAANAC CCTCGCTGCT GGTCAAAAA 120  
CCCTAGTTCC TGAACTCATC AAAGAACCTT ACTCCCTGG ACGGCCAGAT ATTCTTGTC 180  
TGTGTGGAGG GGTGATACCA CCNTCAGGAT TATNAATTTC TGTTGAAGT TGGTGTTC 240  
AATGTATTTG GTCTGGGAC TCGAATTCCA AAGGCTGCCG TTCAGGTGCT TNATGATATT 300  
GAGAAGTGTN TNGAAAAGAA GCAGCAATCT GTATAAAATA AAAATATCAC AAGAGAACAC 360  
CTGTACTN 368

SEQ ID NO:2111

LENGTH:365

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02416

SEQUENCE DESCRIPTION:

GATCGAAAGA AATCTAAGTG ATACGGCCCA ATGAAGCTAA AATATAGCCT TCTGTTAAC 60  
AAATAGTATT TCCTTCCCC AAGTAGTTCA TTTTCTAGAT GCTTGTCAA TGAATTAATG 120  
TCCTCTGATG AAGAGTGTCC TTCCGTTCT AAGGTCTCT CAATCTCAGC AATAGAGCTT 180  
CCCAGCAGCG TTCAAGACAC ATCATTATA CACAGGCACA GGGCCTTCC TGAAATGGGT 240  
GCATTTTAC CAACTACAAT CATGTAATT TTTGGAAAT TTTTAAAT TTTCGNTNCT 300

00823

2153480

TTACATTACA ATTGGGTGAA ACACATTTA CAGCTCTCAA TAAATGTTG CTGGTCGCTC 360  
TGAAA 365

SEQ ID NO:2112

LENGTH:363

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02417

SEQUENCE DESCRIPTION:

GATCAACGAT TACGTGGAGA AGGGTACTCA AGGGAAAATT GTGGATTGG TCAAGGAGCT 60  
TGACAGAGAC ACAGTTTTN CTCTGGTGAA TTACATCTNC TTTAAAGGCA AATGGGAGAG 120  
ACCCTTTGAA GTCAAGGACA CCGAGGAAGA GGACTTCCAC GTGGACCAGG TGACCACCGT 180  
GAAGGTGCCT ATNATGAAGC GTTTAGGCAT GTTTAACATC CAGCACTGTA AGANGCTGTC 240  
CAGCTGGGTG CTGCTGATGA AATACTGGG CAATGCCACC GCCATCTTCT TCCTGCCTGA 300  
TGAGGGGAAA CTACAGCACC TGGAAAATGA TTGACCAAAAA TACCAAGTCT CCCCTCTTC 360  
ATN 363

SEQ ID NO:2113

LENGTH:362

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02418

SEQUENCE DESCRIPTION:

GATCCCAGTC GCATACCAGG TGTCCCTCCTC CAGGTCTGTA ACGGCAAAGG CACTGCCCGC 60  
ATCGCCATAG CAGGTGTCTT CTTGGTACTT AGACATGCCA GCACAGAAGG TGTGTTCAT 120  
CAGTATGGGC TGCACCCCTA CAGGGCTCTT CGGTGTCTTC CATCCAGGAC TGGGTTCAGA 180  
AGACCATAGC TGAGAACTAA TGCAAGGCTG GCCGGAAGCC CTTGCCTGAA AGCAAGATTT 240  
CAGCCTGGAA GAGGGCAAAG TGGACGGGAG TGGACAGGAG TNGATGCGAT AAGATGTGGT 300  
TTGAAGCTTG ATGGGTGCCA GCCTGCATTG CTGAGTCAT CAATAAAGAG CTTTCTTT 360  
GN 362

SEQ ID NO:2114

LENGTH:362

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02419

SEQUENCE DESCRIPTION:

GATCNGACAG GCACCAGCAA TGACACAGCA TAAACTGTTG GGCACAGGAA AGAGGCTTGA 60  
CACCACCCAGC CCACCCAGGA ATGCAGTTCA GCCACACGA GGACACGAGG AACCTGCACC 120  
ACAGCCGCAG TCAAGAGAAT GCTGGTGGTG CCAAGNTGCA GGGTGTGGCC TGCTGGAATG 180  
GAAGCCCATG GTGGTNCTA TAAAGTCAAT GNCACAGCAC ATGCCACAGCA ATCCACTGTG 240  
GGATTNGNGA TGANACTANG CNCATAAAAC TGTNCGAATT TTNCTGTGCT TTTCATATCN 300  
TCAATNTGAA TCAANTGCTT CATTGGGTAC TGTAACGTG GNTACTTNAG TGAATCTCTN 360  
TN 362

00824

SEQ ID NO:2115

LENGTH:355

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02420

## SEQUENCE DESCRIPTION:

GATCATATAG TAGGTTAGG TTTAACTTT TAAGAAATTG CCAAGCTTT CCAAAGTGGC 60  
 TGTCCTCTT TACATTTCCA CCAGCAATGT ATAATGAATG GTTCAGGTTC CTCCACATTC 120  
 TTGTCGGCAC TTGGACTTT CTGTTTGTT GTAGCCATTG TAGGGATGC AAAGTGGCAT 180  
 CTCATTATGG TTCATTTGCA TTTCTCTGAC AACTAATGAT TTTGAGGCATC TTCATGCGAT 240  
 TGTAAACCAT TTGTATATCT TTAGTGAAT ATCTATTCAA TTATTGCCA TTTTTAAATT 300  
 GGNTCACATG GCTNATTAAT GNATTGTAAG AAAGGTTAC ATATTCTGG ATACN 355

SEQ ID NO:2116

LENGTH:350

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02421

## SEQUENCE DESCRIPTION:

GATCATGATT TTGTAGTACA GGAAGACTTC ATGAAAGCAG TCAGAAAAGT GGCTGATTCT 60  
 AAGAAGCTGG AGCTCAAATT GGACTACAAA CCTGTGTAAT TTACTGTAAG ATTTTGATG 120  
 GCTGCATGAC AGANGTTGGC TTATTGAAA AATAAAGTTA AAGAAAATAA TGTATGTATT 180  
 GGTAATGATG TCATTAAGA TATATGANTA AAAATATGAG TAACATCATA AAAATTAGTA 240  
 ATTCAACTTT TAAGATACAG AAGAAATTG TATGTTGTT AAAGTNGCAT TTATTGCAGC 300  
 ANGTTACAAA GGGGAAGTGT TGAAGCTTT CATATTGCT GCGTACATN 350

SEQ ID NO:2117

LENGTH:375

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02422

## SEQUENCE DESCRIPTION:

GATCCGCAGN CAGAACGCTCT GCCCTCTGT ATCCTATGTA TGCAGTGTNN TTTTNCTTGC 60  
 CAGCTTGGGC CATTCTTGCT TAGACAGTC GCATTTGTNT CCTCCTTAÄ CTGAGTCATC 120  
 ATCTTAGTCC AACTAATGCA GTGATACAA TGCCTAGATA GAAGAAGCCC CACGGGAGCC 180  
 AGGATGGGAC TGGTCGTGTT TGTNCTTTN TCCAAGTCAG CACCCAAAGG TCAATGCACA 240  
 GAGACCCCGG GTGGGTGAGC GCTGGCTTCT CAAACGGCCG AAGTTGCCTC TTTTAGGAAT 300  
 CTCTTGAA TTGGGAGCAC GNTGNCTCT TGAGTTGGA GCTTTAAAAA GTACTTTNTT 360  
 TACACATTT GGAAA 375

SEQ ID NO:2118

LENGTH:339

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02423

2153480

SEQUENCE DESCRIPTION:

GATCTCTAAC CAGAAATAAA CAGGAAGACT CAGTNGTTA CAAAAGACAT TTTAGTTTA 60  
CACGTACAGA AAATTCTACC CNGGCATTAC AGAATTCTTA GACTTCTAA ATTCCCTGATT 120  
TTCCTGGTA TTTACATTT GATAAGGGAG CCAATGGTC TTCAAACATT TGAAAAGAAC 180  
ACATACACAC TGGACAATT CAAACGNAC AAACAAACGC AACTGTCCCTT CTTTCTCATT 240  
CCTGTCCCTC AGCCACCCAG TTTCTTCCTC CCTGAGGGAA TCAGTTATCA TTNGCTGGGT 300  
CATACTTCCA GATTATCCTG TGCCTATGTA AGTGTGTGN 339

SEQ ID NO:2119

LENGTH:334

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02424

SEQUENCE DESCRIPTION:

GATCTGGAC GTNCACGAGT NAGGGGCTGG CCACCCAGCC CACAGCCTTG CCTGACCACC 60  
CTCCAGCAGA TAGACGCCGG CACCCCTTCC TCTTCTTAGG GTGGAAGGGG CCCTGGTNCN 120  
NGCCTGTAGA CCTATCGGNT CTCATCCCTT GGGATAAGCC CCAGTCCAGG TCCAGGAGGC 180  
TCCNTCCCTG CCCAGCGAGT CTTCCAGAAG GGGTGAAAGG GTTNCAGGTC CCGACCACGT 240  
ACCNNTCCCG GGTGNCCCTC CTCCCCANCT TACACCTNAA GCCCAGCAGC NAGTAGNCTT 300  
TGAACAGAGG GAGGGAAAGGA CCCATGGGTC TCCN 334

SEQ ID NO:2120

LENGTH:330

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02425

SEQUENCE DESCRIPTION:

GATCAAAGAG AAAATAAAAA ATCGCTACTT CCCTGCCTTT GAAAAAGTCT TAAAGAGCCA 60  
TGGACAAGAC TACCTTGTG GCAACAAGCT GAGCCGGGCT GACATTCACT TGGTGGAACT 120  
NCTCTACTAC GTCGAGGGAGC TTGACTCCAG TCTTATCTCC AGCTTCCCTC TGCTGAAGCT 180  
CTCCAGGACA CTGGCCCCCC ACACTGTATC TCTCACTGAG AAAAGGTGGT CCCATGGCCC 240  
TGAAAACCAG AATNAGCAAC CTGNCCACA GTGAAGAAGT TTCTACAGCC TNGGCAGCCC 300  
AAGGAAAGCC TCCCATTGGA TGAGAAATCN 330

SEQ ID NO:2121

LENGTH:327

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02426

SEQUENCE DESCRIPTION:

GATCGAAGTA AAATAGAAAT GGGACTNGCT TTCCACAGGA AGTAAACTGC TTCAGAGCCC 60  
ACAGTCCCCT GCTCAGTGTG CCGAAAGAAG TCAGTCATCC CTGTTGGCAG TAAATCTCC 120  
CACAGGCCGT CCATTAGAGA TTTAACTAGA TATGTCAT AGAAAGAGTC TGAGGCAAGT 180  
GGAAATGAGG NNCGGAAACT TAGGTTGGGA GAATATTTT NTTNTATTCA TTCTGTTGC 240  
TTAACCTCAGA GTACAGTTG TGCTATTCA TATCTGTACT CCAGGCAGAA ATATAACTTG 300

00826

AAAATACTGT GTCTAAAGAA ATTTCAN

327

SEQ ID NO:2122

LENGTH:324

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02427

## SEQUENCE DESCRIPTION:

GATCCTCGTC ATCAAGGATG GCTGCATCGT GGAGAGGGGA CGACACGAGG CTCTGTTGTC 60  
 CCGAGGGTGGG GTGTATGCTG ACATGTGGCA GCTGCAGCAG GGACAGGAAG AAACCTCTGA 120  
 AGACACTAAG CCTCAGACCA TGGAACGGTG ACAAAAGTTT GGCCACTTCC CTCTCAAAGA 180  
 CTAACCCAGA AGGGAAATAAG ATGTGTCTCC TTTCCCTGGC TTATTCATC CTGGTCTTGG 240  
 GGTATGGTGC TAGCTATGGT AAGGGAAAGG GACCTTCCG AAAAACATCT TTNNGGGAA 300  
 ATAAAAATGT GGACTGGTGC GAGN 324

SEQ ID NO:2123

LENGTH:355

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02428

## SEQUENCE DESCRIPTION:

GATCTGAACA TTCAAAAGAA AGCTTTGGAA AAAAAGAGCT GGCTGGCCTA AAAACCTAAA 60  
 TATATGATGA AGATTGTAGG ACTGTCTTCC CAAGCCCCAT GTTCATGGTG GNNCNNNTGGT 120  
 TATTTGGTTA TTTTACTCAA TTGGTTACTC TCATTTGAAA TGAGGGAGGG ACATACAGAA 180  
 TAGGAACAGG TGTTTGCTCT CCTAAGAGCC TTCATGCACA CCCCTGAACC ACGAGGAAAC 240  
 AGTACAGTCG CTAGTCAAGT GGTTTTAAA GTAAAGTATA TTCATAAGGT AACAGTTATT 300  
 CTGTTGTAT AAAACTATAC CCACTGCAAA AGTAGTAGTC AAGTGTCTAG GTCTN 355

SEQ ID NO:2124

LENGTH:324

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02429

## SEQUENCE DESCRIPTION:

GATCTCAGAA CTGAAGGCCG CCCTGACATG AAGACTGAGC TCTTTCCAG CTCATGCCA 60  
 GGTGGAATCA TGCTGAATGA GACAGGCCAG GGTTACCAAGC GCTTTCTCCT CTACAATCGC 120  
 TCACCAACATC CTCCCAGAAA GTGTGTGGAG GAATTCAAGT CCCTGACTTC CTGCCTGGAC 180  
 TCCAAGGCT NCTTATTGAC TCCTAGGGAA TCAAGAGGCC TGTGAGCTGT CCAATAACTG 240  
 ACCTGTAACT TCATCTAAGT CCCCCAGATGG GGNACANTGG GGAGNTNGAG TTGTTGGAGG 300  
 GAGGAAGCTT GGAGACTTCC CAGN 324

SEQ ID NO:2125

LENGTH:324

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02430

## SEQUENCE DESCRIPTION:

GATCCATCTT CATCCATTGC ATTGGAAACT NCTTTATGCT GCTGCAGTCT GCAAAGTCTA 60  
 GAGCTTTAT CAGGCCATGT CATAACCAAG AAAGCACCTA TTTAAAGAAA AAACAATTCC 120  
 CTGAGCTCTC AACTCCAAGT TGTAGATTG GTGTCTTCCT TGTCCTTACT TTAAAAAGTC 180  
 ATGTGTTAAT TTTNNTCCTG CCTGTATTTG TATGCAAAAT GTCCCTATC TGCTATNAAA 240  
 GAAAAGCTAC GTAAACCCT ACATTGTANC CTTCTAAGTN ATTNTTAATT AGNAGGGNAT 300  
 TATNTTGAG TACCAANTTGG GAAA

324

SEQ ID NO:2126

LENGTH:321

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02431

## SEQUENCE DESCRIPTION:

GATCGTGAAG ACCTGCTGAG CCAGCCTGTT CTCCGGGCCT GAATGTCCTGG GGTGCTTGTG 60  
 CCTTTCTGA GAAGCGTTGT GACTGCTAA CATCCCCATC AAGGTTTGAG TCCACAAAAG 120  
 TGGACCTCCC TATCATGCTT CCCCTTCCCT CTAGCATGTG GGAAGGGACT GCTGTGAAGA 180  
 ATGNCAGATG TGGGGCCTCT GCCAAGTTCT TGCATTGCTA AATAAGGGCT TCCTCTGCCT 240  
 TCTACCTACA GTGCATTGA ACTGCCTTCT GAAAGAGGTC CAGGGAGGGA TTTAGGAAAT 300  
 AAAGNTTCTA CCTATTGAA A

321

SEQ ID NO:2127

LENGTH:319

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02432

## SEQUENCE DESCRIPTION:

GATCCTAACG GAAGATGGAT TTCAGTTCAT CAAATCATCA TTAATGACTT TATGTATTAT 60  
 TTGCACAGGG AGAATTGAAA CTGAGTATAA TCAATAAGCT AGATACGAAA TCAGTTCTC 120  
 AAACTGAGCT TCAGAAAGGG GCATTTGTA CTCTTGTGTT TGCTAACTG GTTTTGTGTT 180  
 TTTGCAGAAAT TAACTATAAC ANTCACTGGC TACCGAAGTA AACTGATGTA CTGAATTCCA 240  
 TAATACATAA CATTCAATT TTACCACTNC TGTTTAGCGA ACTTGTATAC TTATTCTG 300  
 TTCAGNTTAA AAAAGAAA

319

SEQ ID NO:2128

LENGTH:315

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02433

## SEQUENCE DESCRIPTION:

GATCACACCT GAAAGCAGTG GTCCCAGCTC TGTGCTGTGG GACATCACAG GTCCTAAACA 60  
 GTGATAGAGA AAGGGCTGGG GAGTGGCAGC TGGAATCTCT GCTTCCGTCT GAACATCTGG 120  
 ACACACATGT CAGAGAATCT TTGCATTAAA TGGACTGCCA AATCTATTG GTGATTAAT 180  
 GGCTGTGCGG TGAGGGGAGA ACCCTGGCA GTCTGGAGAC TGAGGTGCCA TTCTCGGCTA 240

2153480

GAGACACCAC CCAAAGAAGA GATGGGCTGG CTACTAAAGA CAAGTNTCAG TTGAATAAAAT 300  
GTCTTTAAC CTAAA

315

SEQ ID NO:2129

LENGTH:311

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02434

SEQUENCE DESCRIPTION:

GATCATTGTC CCTACAGACA CCCAGAACAT CTTCTTCATG AGCAAAGTCA CCAATCCAA 60  
GCAAGCTAG AGCTTGCAT CAAGCAGTGG GGCTCTCAGT AAGGAACTTG GAATGCAAGC 120  
TGGATGCCTG GGTCTCTGGG CACAGCCTGG CCCCTGTGCA CCGAGTGGCC ATGGCATGTN 180  
TGGCCCTGTC TGCTTATCCT TGGAAAGGTGA CAGCGATTCC CTGTTAGCT CTCACATGCA 240  
CAGGGGCCCA TGGACTCTTC AGTCTGGAGG GTCCCTGGNC TNCTGACAGN AATAAATAAT 300  
TTCGTTGGAA A 311

SEQ ID NO:2130

LENGTH:309

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02435

SEQUENCE DESCRIPTION:

GATCCCAACT GCTCTGCGC CGCCGGTGAC TCCTGCAAAT GCAAAGAGTG CAAATGCACC 60  
TCCTGCAAGA AAAGCTGCTG CTCCCTGCTGC CCTGTGGGTT GTGCCAAGTG TGCCCAGGGC 120  
TGCATCTGCA AAGGGGCGTC GGACAAAGTGC AGCTGCTGCG CCTGATGCTG GGACAGCCCG 180  
CTCCCAGATG TAAAGAACGC GACTTCCACA AACCTGGATT TTTTATGTAC AACCTTGACC 240  
GTGACCTTT GCTATATTCC TTTTCTATG AAATAATGTG AATGATAATA AAACAGCTTT 300  
GACTTGAAA 309

SEQ ID NO:2131

LENGTH:307

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02436

SEQUENCE DESCRIPTION:

GATCCTGGCC TCGCAGTTCC TATCCNTGA CCCAGAACAG CTCACCAAGG AGCTGCAGCA 60  
GCATGTGAAG TCAGTGCAGC CCATACAAGT CCCAAANAAG ATAGAGTTG TNTGAACCT 120  
GCCAAAGCTG TCACAGGGAA ATTCAACAGA CCAAACCTCG NGNCAAGGAG TGGAAGATGT 180  
CCGGAAAAGC CCGTNCGAGT GAGNCGTCTA GGAGCATTCA TTTGGATTCC CTCTTCTTTC 240  
TCTTTCTTT CCCTTGGGC CTTGGCTTAC TATNATGATA TGAGTCCTTT ATGAAGACAT 300  
GATGAAA 307

SEQ ID NO:2132

LENGTH:306

TYPE:nucleic acid

00829

2153480

TOPOLOGY:linear

CLONE:HUMGS02437

SEQUENCE DESCRIPTION:

GATCCTGGTG GCGACCATGG AGAGGAACT GGAGGGCAGG GATGGAGCTG AAANCTTGGC 60  
GGCCCAGAGA GAGGTCCACC CCAAGCAGCC TGAGCCCTCA GCCACCCCCC AGCTCCCTGG 120  
CAGCTCCCT CCACCTGCCA ATGTCAGCGC CACACTGGTG TCTGAAAGGA ATAAGGAGAA 180  
CAGGACAGAC TAACTTTTA AATGATATGA AGAAATCAGA GGTGAAAATT GTACATTGGG 240  
AATATATTAA TGCAAATTT ATTGAAATT ATTGAAATA AAGATTTCT CAGTGGTCTA 300  
GAAAAA 306

SEQ ID NO:2133

LENGTH:306

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02438

SEQUENCE DESCRIPTION:

GATCTGGGCT GGTCCCTTTC CCATAAAATN AGGTCCCTGG TTGTATGTC CCATAGCACC 60  
CCATACTTCC TCTCTNAGAA TAATCATTTC CCTTGTAATG CTCAGCATCC GCATCCCTGCT 120  
TGACTGCAA CTTGCTGAAG GTAGGGACTG TTTGTCTGG ACTTCGCTGC CAGTCCTTAG 180  
AACAGTGTCT GGGACACAGT GTGTTCTCAA ATATTTGTTG CTGGAATAAA TGAATGACCT 240  
AAATCAGTCT TTTAGGGATT TACTGTTAAC CACCATGGGA AAATTAATAA AATGCGGGGA 300  
AGGAAA 306

SEQ ID NO:2134

LENGTH:305

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02439

SEQUENCE DESCRIPTION:

GATCTGACCC CACAGCCTTT GGCTGCTCA CCCGACCAGC CTGGGCCGCA TTCCCTGCAG 60  
GACCTCCCGG GTCAGGCAGG GCGGCCCCCT GCTCCACACA CTGCTGCATC TTGGGTCTCA 120  
GGGACCCAGA CAGATGGACT TACATGGAGC TGGGCACTGC CCTGCCTCAA CAGGGTCCAT 180  
TGCCTCCCTCG CCTCCAGAAC TTGGAGCAGG GAAGTGGGCA CCCTGAGGCC TCCAGCACCA 240  
GTTCCGTCTAC TCTCGTTCTC GGGGAACCCC CACTCTGACC TGTTATTAAGA GTTCACATTT 300  
TGAAA 305

SEQ ID NO:2135

LENGTH:251

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02441

SEQUENCE DESCRIPTION:

GATCAACCTG AGAAAAATTG CTGAGCTCAT GCCAGGAGCA TCAGGGCTG AAGTGAAGGG 60  
CGTGTGCACA GAAGCTGGCA TGTATGCCCT GCGAGAACGG CGNGTCCATG TCACTCAGGA 120  
GGACTTTGAG ATGGCAGTAG CCANGTCAT GCAGAAGGNC AGTGAAGAAA ACATGTCCAT 180

00830

CAAGCANTTA TGGANGTGAG TGGACAGCCT TTGTGTGTAT CTCTCCAATA CAGCTCTGTG 240  
GCCCAAGTAA A 251

SEQ ID NO:2136

LENGTH:301

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02442

SEQUENCE DESCRIPTION:

GATCTGCATC CCCAAAAGTA TCACTCCTTC TCGAATCCTT CAGAACATCA AGGTGTTGA 60  
CTTCACCTT AGCCCAGAAG AGATGAAGCA GCTAAATGCC CTGAACAAAA ATTGGAGATA 120  
TATTGTGCCT ATGCTTACGG TGGATGGGAA GAGAGTCCCA AGGGATGCAG GGCATCCTCT 180  
GTACCCCTT AATGACCCGT ACTGAGACCA CAGCTTCTTG GCCTCCCTTC CAGCTCTGCA 240  
GCTAATGAGG TCCTGCCACA ACGGAAAGAG GNAGTTAATA ANNGCCATTG GANGCATNAA 300  
A 301

SEQ ID NO:2137

LENGTH:302

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02443

SEQUENCE DESCRIPTION:

GATCCGAGAG GGCATGGCG CCCTGCAGTC TGACCCCTGG CAGCAAGAGC TCTACCGCAA 60  
CTTCAAAAGC ATCTCCAAGG CCTTGGTGGA GCGGGGTGGT GTGGTCACCA GCAACCCACT 120  
TGGCTTCTGA ATACTCCCGG CCAGGGCCTG TCCCAGTTAT GTGCCTTCCC TCAAGCCAAA 180  
GCCGAAGCCC CTTCCCTTAA GGCCCTGGTT TGTCCCGAAG GGCCCTAGTG TTCCCAGCAC 240  
TGTGCCTGCT CTCAAGAGCA CTTACTGCCT CGNAAATAAT AAAAATTCT AGCCAGGTCA 300  
AA 302

SEQ ID NO:2138

LENGTH:297

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02444

SEQUENCE DESCRIPTION:

GATCATCCAG AAGGAGCCCG TTGAAGTGGC CCCAAGCCAG CTCTCTGCAT TTCGTACTCT 60  
CCTGTTTCT GCACTTGGTG AAGAGGAGAA GATGATGGTG AACAACTATC GCCCACTTCA 120  
ACCCTTGATG AACCGGAAGG TCTGGGCGTC CTTCCAGGCC ACTAATGAGG GCACAAGGTC 180  
CTAGAGACAT TAGGTCCACA TGAATAGCAG AACTGACTTT GAAGGAAGGA AGCGTTGTTT 240  
CCCAAGTTTC ACAATGTGAT TGTACATGAC TTCTGAAATT AAAAAGAGAG CATGAAA 297

SEQ ID NO:2139

LENGTH:295

TYPE:nucleic acid

TOPOLOGY:linear

2153480

CLONE:HUMGS02445

SEQUENCE DESCRIPTION:

GATCTATGCC AGCAAAACAT CATTGAGA CAAACATTT TGTGGCAGAT GTTTTCCTA 60  
AAAAGTACTA TATCATCCAA GAAATATTG AGTAAAATCC CTTGTTCTT TGGGTGACAT 120  
TAACTGACAT TTGCTTTTT TCAAGACCTA ATAGAAAATA AGAAAGCCCA TAATGTATT 180  
AGAAACAGGA ATCCTCAGAG CAATTCTCTG TATTCTCATA TAATTCAAT GTAAAACAGA 240  
AACATATTG ATGTGTTGGT GATAGGCTTG AATTATTAAA AACTTCAAAA ACAAA 295

SEQ ID NO:2140

LENGTH:294

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02446

SEQUENCE DESCRIPTION:

GATCGAGGCT GCAGGATATG CTCAGACTCT AGAGGCCTGG ACCAAGGGGC ATGGAGCTTC 60  
ACTCCTTGCT GGCCAGGGAG TTGGGGACTC AGAGGGACCA CTTGGGGCCA GCCAGACTGG 120  
CCTCAATGGC GGACTCAGTC ACATTGACTG ACGGGGACCA GGGCTTGTGTT GGGTCGAGAG 180  
CGCCCTCATG GTGCTGGTNC TGTGTGTGT AGGTCCCCTG GGGACACAAG CAGGCGCCAA 240  
TGGTATCTGG GCGGANTCAC AGAGTTCTTG GAATAAAAGC AACCTCAGAN CAAA 294

SEQ ID NO:2141

LENGTH:292

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02447

SEQUENCE DESCRIPTION:

GATCTGGTT GTGGATGAAC AAGTGTCAAG CTGGACATCT CAATGGNGTT TATTACCAAG 60  
GTGGCACTTA CTCANANGCA TCTACTCCTA ATGGTTATGA TAATGGCATT ATTTGGGCCA 120  
CTTGGANAAC CGGGTGGTAT TCCATGAAGA ANCCACTATG AAGATAATCC CATCAACAGA 180  
CTCACAATTG GAGATGACAG CAACACCACC TGGGGGGAGC ANACAGGTGG AGACGTTAAA 240  
NGCCGTTCAN TGNGTTTCT NTTAAAGNC TTTATCTGAC CNGGGGTANN GN 292

SEQ ID NO:2142

LENGTH:280

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02448

SEQUENCE DESCRIPTION:

GATCGGAAAA AAATTCTTGA ACGCAAAGCC AAGTCTCGAC AAGTTGGAAA AGAGAAAGC 60  
AAATATAAAAG AAGAACTTAT TGAGAAAATG CAGGAATAAA TAGAACCTGT TGTGCAACCA 120  
CGGTTTAACC GGAGATTTG AGGCTAGGGT GTGTTCTT CGAACTTTTC GGAATGTCTG 180  
GAACATTCA TTTCCTGTT TGTACCTGT GCCTCTGTAA ATCTACTTTT GCAATTAA 240  
GTAATAATT TATGAATAAN AATGGGAAAT GCTTCCTAAA 280

SEQ ID NO:2143

00832

LENGTH:280

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02449

## SEQUENCE DESCRIPTION:

GATCCCATAA CAGGCTACCC CTTGGCCTCA TGCTGGAGTT GTGTGTGTCT GTCTTCATCC 60  
 CAGGCTGAGC TCCTTGAGGT GAGGATGTTG TGCTGTTGC CTCCCTCACA GTGCCTTGGT 120  
 CTTAGTGGAT GCCCAGTTGT CTTGTGAATG ACTTTAAGA AGTGTACTTA AGAGAAAAAT 180  
 CCTACCNAT NNNNNNTAAT TACAAGTCAT GTTTTGTNG CTTAAAGGTG ATAAATCAGT 240  
 GTATATNATN NGNTAATGTC CATAAAGCC AGTTTTAAA 280

SEQ ID NO:2144

LENGTH:278

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02450

## SEQUENCE DESCRIPTION:

GATCCTAGAG CCTGACGTTG AGTGAACCCA TGTTTCTGGG TGGGTGAAAG GGGCCAACC 60  
 CTGCCCACTT CAGCCCAGCC CGCCCAAGGG GACTTGTGCC AGCAGAACAT GTNGGAGGAA 120  
 GAAGCCCCGT TTCCAGGGCA TCCGCAGGCC AGGGTAGGGA GAAATATTCT CTCCACTTG 180  
 GGGGAGAGTT CTTGCTCTCG ACCTAGTGGT TTCTACTCTC ACCGACTTAT TCTGATTCA 240  
 GAAATAAAAT GAAATGTCTT ATTTTGGGA AAGTTAAA 278

SEQ ID NO:2145

LENGTH:315

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02452

## SEQUENCE DESCRIPTION:

GATCCCACTG GGGCCTNTGG GAAGGNGACA GACTTATNAC TAGATGATTG GCTGGTGTCC 60  
 ATCTTTGGGA ATCGACGTCT CAAAAGGTTA TCCATGGTGG TACAGGATGG CATACTGAAG 120  
 GCCCTGAATG TGGAAACCAGA TGGCACAGGC CTCACCTGCA GCCTGGCACC CAATATCATC 180  
 TCACAGNTCT GAGGCCCTGG GCCAGATTAC TTCCCTCCACC NNTCCNTATC TNACCTGCC 240  
 AGCCCTGTGC TGGGGCCCTG CAATTGGAAT GTTGGCCAGA TTTCTGCAAT AAACACTTGT 300  
 GGTTTGCGGG TCAA 315

SEQ ID NO:2146

LENGTH:275

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02453

## SEQUENCE DESCRIPTION:

GATCCCAGGA CCATTTGGCT AGTGTGCCTA GGTGACCACA TGATTGCTGT TTTACCAAGGA 60  
 ATGCAGCATC CCATTGACAA AACAAAGTGTCT CTGAGAAGGT TTAAAATACT ACAGNGAATA 120  
 TGGGANCACA GNCCCTGAAA TTTAGCTGAG TTGTAACAGC TGAAACTCCA AGAGGTGTCT 180

TCCTTGTNN GAGGTGNACT AGTGGTGCCT CCAGAGGGCA GCTTGAAACC CGTAAAGCCT 240  
 GTTTGGGGA ATCCTTTTT GNCTTGCTT GNTTN 275

SEQ ID NO:2147

LENGTH:274

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02454

SEQUENCE DESCRIPTION:

GATCATCAAT GATTATTGG CACGTTCTAT TGGGATGGTC GAAGTTAATA CAGTAGACAA 60  
 ATACCAAGAT AAGGGACAAA AGTATTGTCC TAGTATCTTT TGTTAGAAGT AATAAGGATG 120  
 GAACTGTTGG TGAACCTTG AAAGATTGGC GACGTCTAA TGTTGCTATA ACCAGAGCCA 180  
 AACATAAACT GATTCTCTG GGGTGTGTGC CCTCACTAAA TTGCTATCCT CCTTTGGAGA 240  
 AGCTGCTAA TCATTAAAC TCAGAAAAAT TAAA 274

SEQ ID NO:2148

LENGTH:266

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02455

SEQUENCE DESCRIPTION:

GATCGCAGAG AAGGCAGCTG ACATTATCAA GGGGCAGCCT GCACTCTGGG ACAAAAGATGT 60  
 CCCTGTCTAC AAGCCCAGGA CGCTGGCCAC CCAGCGCTAA GACAGTTGCT GCTGGAGGAT 120  
 GACCAGGGAA GCCCCCTGAT AAGCCAAGAG GGCCAGCACA GCCCTGCTC CCAGGCTCCT 180  
 GCCTGAAACT ATCTAGCACA CTAGGACCCA GGTGGTACCC TACTCAGTGG CTGAGAATTG 240  
 GATAAAGTCT TGGGAAATGA GACAAA 266

SEQ ID NO:2149

LENGTH:265

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02456

SEQUENCE DESCRIPTION:

GATCTTAAC AAATGTTTA AGCAATTAA AAAAGGCAGG ATGTTATTGA CATTATACAC 60  
 TGAAGTCTTA ACATTTAAC ATTATAGTG CTTATTTGCA AAATTGTATA ATTAGGAATT 120  
 ATTCAGAGA CAATGTTTC TTTTCAGGT GAGTAGTTGC CGCGTAATAT CATTGGAGTA 180  
 CATTCTTAT ACTGTTGTG AAATTAATAC TAGCATATTA AGTGTACAAA TAGATTAGA 240  
 AAACAATAAA AAATTGCATG CTAAA 265

SEQ ID NO:2150

LENGTH:264

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02457

SEQUENCE DESCRIPTION:

2153480

GATCCTAGTG TTTAATTAC CTGTGTGCAG CTATTTAAA TAGCATTAA CTTGAATAAT 60  
ATGTATGTTG TCATTGTTTC ATGCTATACT TTGTGGGATA AAACTTGGGA ATGAGTGTGG 120  
TAAGAAATTT ATAAGTTT GCTTTAAAA CGTGGACATA ACTCATTAA CTAGTTTG 180  
ACAATTGTGT GTTTAGTGT CTAGTCTGCA GAGAGCTGTG TGATTAATAA ACGTGGAAATT 240  
AACAGAATTT CCTCTCCCTG TAAA 264

SEQ ID NO:2151

LENGTH:259

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02458

SEQUENCE DESCRIPTION:

GATCCTGGGC TCATAGGCAG TCCCTTCAC TTCCCTGTCT TGCTCCCTGC TATGCTGGAG 60  
ATGAATGTGA CTAAAAGGGC CATCTTGCTG GCTTAATGTG TGGCTGGAGA GACCAGCCTG 120  
GAGACAATGT GGCAAATGG GGCCTTCAT CCAGTCTGTC TAAGCCCTGT CGACTTGGGG 180  
AGGTGATTC TTCCCTGGTT CTATATGTNA AGCAAAATAA ATGTTTAAA ATTAAAAGCA 240  
NNAAAGCAGA ATGTGAGTN 259

SEQ ID NO:2152

LENGTH:255

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02459

SEQUENCE DESCRIPTION:

GATCAAAGCT GGACTGGAAA TTGTATCGTG TAATTATTT TGTGTTCTTA ATGTTATTTG 60  
GTACTCAAGT TGTAATAAC GTCTACTACT GTTATNCCA GTGTCTACTA CCTCAGGTGT 120  
CCTATAGATT TTCCCTCTAC CAAAGTCAC TTTCACANTG AAATTATATT TGCTGTGTGA 180  
CTATGATTCC TAAGATTCC AGGGCTTAAG GGCTAACTTC TATTAGCACC TTACTGTGTA 240  
AGCAAATGTT ACAAA 255

SEQ ID NO:2153

LENGTH:248

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02461

SEQUENCE DESCRIPTION:

GATCTGTGCA GCAAAGCACC ATGGTACATG TNNTACCTAT GTAACAAACC TGCACATCCT 60  
GCACATGTAC CCTGGAACCTT AATAAAAGTT GGAAATTTTT AAAAAGAATG AATAAGACCT 120  
GGTATTTGAT AGCACAAACAG GGAGACTATA GTCAACAGCA ATTTAATTGT ATATTTAAT 180  
ATGACTAAAA GAGTATAATG GNTGTTGT AACACAANTA AATGCTTGAG GGGATGGNCA 240  
CCCCNAAA 248

SEQ ID NO:2154

LENGTH:245

TYPE:nucleic acid

00835

2153480

TOPOLOGY:linear

CLONE:HUMGS02462

SEQUENCE DESCRIPTION:

GATCTTAAGC TTTGATAAGA GCTGTCTGT GGCTGAGTATG GGTGTGTATG TNAAGGTGCT 60  
TCCATCCAGG CTGGGTCAG AAGCCATAGC TGNGACTAAT GCAAGCTGGC CGAACCTTG 120  
CTGAAAGAAG CTTTAGCTGG AGAGGCAAAG TGGCGGGAGT GGCAGGAGTG GATNNGATAA 180  
GATGTGTTT AAGTNATCGG TNCAGCCTGA TTCTGAGCAA TAATAAAGAN TTTCTTTGC 240  
CCAAA 245

SEQ ID NO:2155

LENGTH:244

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02463

SEQUENCE DESCRIPTION:

GATCCAGGAA GCTCCAAAC CAGAGTGTGA GAAGGCACCT CTTGCCTTC AGGAGAGTAA 60  
GAACCTCTGC GAANCATGGA GAACTTTATG CAACAATTAA AGGAAAGTGG CATGACAATG 120  
GAGGAGCTAA AATATTCTCT GGAGCTGAAG AAAGCTGAGT TGAAGGCAAATTTGTAA 180  
CACTACAGCT GAGCAGATGT AATAGAAATA AACCTATGAA TAAATTNCT TCTTGGTTCT 240  
GAAA 244

SEQ ID NO:2156

LENGTH:237

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02464

SEQUENCE DESCRIPTION:

GATCCTATAT CTTGGTNAAT ATGCTCCAG ATACTTTAAA CATGGCAACC TTTTGGCCTA 60  
AGAGAAATGTT TGTTCATGGA AAAAGCTTT TGAGATGAGA GGGTGTCTTA CTTTCTGTG 120  
GCAATTGATT TTCTGTTTA ACACCCTTTG GGTAAAATCT TGCAAAGAGC TTTTATAATT 180  
NGTTTACTG AATTGTATGG AGATTGTATA CCAAGTAAAG CTCTTTAAA TTACAAA 237

SEQ ID NO:2157

LENGTH:234

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02465

SEQUENCE DESCRIPTION:

GATCCACGCT GGGCCGAGGA TGGGACGTTT TTCTTCTTGG GCCCGGTCCA CAGGTCCANT 60  
GACACCCCTCC CTCCAGGGTC CTCTCTTCCA CAGTGGCGGG CCCACTCAGC CCCGAGACCA 120  
CCCAACCTCA CCCTCCTGAC CCCCATGTAATATTGTTCT GCTGTCTGGG ACTCCTGTCT 180  
AGGTGCCCT GATGATGGGA TGCNCTTAA ATAATAAAGA TGGTTTGAT TAAA 234

SEQ ID NO:2158

LENGTH:233

00836

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02466

SEQUENCE DESCRIPTION:

GATCCCTAAG CTGTAGAACAA TTTAACGTT GATGCCACAA CGCAGATTGA TGCCCTGTAG 60  
ATGGAGCTTG CAGATGGAGC CCCGTGACCT CTCACCTACC CACCTGTTG CCTGCCTCT 120  
TGTGCGTTTC TCGGAGAAGT TCTAGCCTG ATGAAATAAC TTGGGGCGTT GAAGAGCTGT 180  
TTAATTTAA ATGCCTAGA CTGGGGATAT ATTAGAGGAA GCAGATTGTC AAA 233

SEQ ID NO:2159

LENGTH:229

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02467

SEQUENCE DESCRIPTION:

GATCTGTGCA CACTTCTAA ACAGCTTGTN ATGCAAGTNT GAGCCTATTG TGTTACTTGA 60  
CCTTATTTTG GAAGTTTGAA ATTGGCCTAG GAGGAAACCC AGAAATGAAC CAGGGGTATG 120  
TNATCACTTT TTTNATATCA AGTCCTCACCC CTCCTNCCAC ATAATGCTCT ATCCGGCTAA 180  
GGTTGGAACCTGTAAGTGG AGAAGGTGGA ATAAAGTTAC ACCTGGAAA 229

SEQ ID NO:2160

LENGTH:227

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02468

SEQUENCE DESCRIPTION:

GATCCCTGCG AATTACGAAA ACTACTACAT CCATGATTGC CCCAACCCCC TTGGGGTGGG 60  
GCAGAAGGTG AAGCATCCCA ACTGACTAGA GACTCAGGCC CTGCAGGNCC TTATAGAAC 120  
TGTGGCCATC CCTGAGCACC CTGCCACCAG GTGACCTCGG CCATACTCAC TGCCCCCTT 180  
GGGCACCCAC TCACCNAGA ATAAACTTAA CAGTGTCCCCG TGGTAAA 227

SEQ ID NO:2161

LENGTH:226

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02469

SEQUENCE DESCRIPTION:

GATCTTACGA TGCCCTCTGT ACTGACCTGA AGGAGACCTA AGAGTCCTTT CCCTTTTGA 60  
GTTTGAATCA TAGCCTTGAT GTGGTCTCTT GTTTTATGTC CTTGTTCTA ATGAAAAGT 120  
GCTTAACCTGC TTCTGGTTG TATTGGTAG CATTGGGATA AGATTTAAC TGGGTATTCT 180  
TGAATTGCTT TTACAATAAA CCAATTAT AATCTTAAA TTTAAA 226

SEQ ID NO:2162

LENGTH:224

TYPE:nucleic acid

00837

TOPOLOGY:linear

CLONE:HUMGS02471

SEQUENCE DESCRIPTION:

GATCTGCCCTT GCTCACTATT TGCCATTGG CATATATGAT TACCTTGCTA AAAGACATT 60  
 TGGCCAAGAC AAGCCCATNT CCAGAGCTCT AAGAACGCCT AACTACAAGA AAAAGGCCAC 120  
 CTAGGCAATG GAAGCCTCA AAGAAAGTCGG AATGTCTAG TCTGAAATG AAAGGGAAAC 180  
 TGGGAAACTG GGTTTCTCAT TAAAGTTGTT TCCCCACTCTN TAAA 224

SEQ ID NO:2163

LENGTH:221

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02472

SEQUENCE DESCRIPTION:

GATCTAAATT GATAAACAC ATGGCTTGTG TGAAAACGTGA GCAGGTGTTT GTTACCCAT 60  
 AGTGTCTGT GTAGTTATTG CTTANTCTGC AGAAAATAAT GACTTAGATG AGATGCTGA 120  
 CTTGCTTCA CTTATTAAAC ATGTTCACCA TGGGATGATG TCTGTAACAT CAGATATTGT 180  
 TCAACTAGAC TAGGATTAA TAAAAATTGT GAAAGCTTAA A 221

SEQ ID NO:2164

LENGTH:210

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02473

SEQUENCE DESCRIPTION:

GATCTTAATT TACAGTTCCA TGGGATTAAA ACAAGTTGC ATTATGTAA TTTGCATTAC 60  
 TTAAAAATT ACAACACAT AATCTCTGAA ACTTACTTCA ATCAATTAC ATCCCTACAA 120  
 CTGTTAAGAT TTATTTGTG ATTAGNATCT TATAGTGGGT ATTCTTTNA GTGCTGATAT 180  
 TTCTATTCA TAAAATCCTG TGNACACAAA 210

SEQ ID NO:2165

LENGTH:209

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02474

SEQUENCE DESCRIPTION:

GATCCTGCAT TAAATTTTA TTTGTAAAAA TTTGAAAATT ATGAGCTATA ACTTATAAAG 60  
 TTTGCCTCT TATGNCTAA ATCTTTAAA GGATTATTG CATTATGTA AAACTGGAAA 120  
 TGAAGTTATA TATGAGTGCA AAGAAATTGA CTTCTGCTCA AATATGTGTT GATACCCTAC 180  
 AGTAAATTGA ATTAATTTT TATCCCAA 209

SEQ ID NO:2166

LENGTH:203

TYPE:nucleic acid

TOPOLOGY:linear

2153480

CLONE:HUMGS02475

SEQUENCE DESCRIPTION:

GATCAGTCAA TTTCCGTGCG TCCGTAACCA GCGGGCCCCCT GGTCAAGTNC TGGCTCTGCT 60  
GTCCTTGCT TCCATTCCCC CTCTGCACCC AGAACAGTGG TGGCAACATT CATTGCCAAG 120  
GGCCCAAAGA AAGAGCTACC TGGACCTTTT GTTTCTGTT TGACAACATG TTTAATAAAT 180  
AAAAATGTCT TGATATCAGT AAA 203

SEQ ID NO:2167

LENGTH:200

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02476

SEQUENCE DESCRIPTION:

GATCTGGACT TCGAAACTTT CCTCATGGAT TCTGAATAAA AGAAACACTC TACACCTCTT 60  
AAATCAAGGT CATGTAGATA ATGACTTTGT TATAAATGCT ACAGCTGTGA GAGCTTGT 120  
CTGATTTCAT TGTCGCTTC TGTAATTCTG AAAAACTTTA AACTGGTAGA ACTTCCAATA 180  
AATAATTNGT TTTAATTAAA 200

SEQ ID NO:2168

LENGTH:200

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02477

SEQUENCE DESCRIPTION:

GATCTTAAGT GTCTCCTTGC TCTGGTAAAA GATAGATTG TAGCTCACTT GATGATGGTG 60  
CTGGTGAATT GCTCTGCTCT GTCTGAGATT TTTAAAATC AGCTTAATGA GAGTAATCTG 120  
CAGACAATTG ATAATAACAT TTGAAAATT GGAAAGATGG TATACTGTTT TTAGAGGAAT 180  
AACCGTATTG GTGGTTAAA 200

SEQ ID NO:2169

LENGTH:197

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02478

SEQUENCE DESCRIPTION:

GATCCAATC CCAGCTCTAC TGTCCTGTC GAATTAGCCT TGGGAAAATC ATTTATATGC 60  
TAAATAATT ACCTTTTAT CTAGGAGATG AAAAGAGGAT AATGTTTCCT TCCATAAAGA 120  
AAGTTCTTGT AAGAATCAAAGAAGAAATGGTG AGCTTTAAGT GGTTTGTAAA CCATAAAACA 180  
CATCATAAAAA GTTCAAA 197

SEQ ID NO:2170

LENGTH:201

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02479

00839

## SEQUENCE DESCRIPTION:

GATCCATGNC ATCTCTCTCT TGCTGTAGGG GAAAGAGAGA TGGGCCAGGC AGAGAACAGA 60  
 ACTGGAGGCA GTCCATCTAG GGAANNNNAC TGTGAGGCCA TACTTGTGAA ACGTCTGGAC 120  
 TGCTATTCTA GAGCTTTAT TTGNGTGTGT TCGTTGCACA NCTTGTTTA AATGTTAAT 180  
 AAAAGCTTTA TAAACTTAA A 201

SEQ ID NO:2171

LENGTH:218

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02480

## SEQUENCE DESCRIPTION:

GATCCCCCAA GTACAGGCCG TAATTNTGT GATAATTGT AATNGTACT TGTACTCCCC 60  
 GGCTGGCAGC GTAGTGGGGC TGCCAGGCC CAGCTTGT CCCTGGTCCC CCTGAAGCCT 120  
 GCAAAACGTTG TCATGGCAG GGAAGGGTGG GGGCAGCTG CGGTGGGNG CTATAAAANT 180  
 GACAATTAAC CGNGACANTN GTNTTTATT TCCTNAAA 218

SEQ ID NO:2172

LENGTH:195

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02481

## SEQUENCE DESCRIPTION:

GATCCTTGCA GGGAGCTTGG AACCTTAGTG CACCTACTTC AGTCAGAAC ACTTAGCACC 60  
 CCACTGACTC CACTGACAAT TGACTAAAAG ATGCAGGTGC TCGTATCTCG ACATTCATTC 120  
 CCACCCCCNT CTTATTTAAA TAGCTACCAA AGTACTTCTT TTTAATAAA AAAATAAAGA 180  
 TTTTATTAG GTAAA 195

SEQ ID NO:2173

LENGTH:194

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02482

## SEQUENCE DESCRIPTION:

GATCCGGCAA CATCAACCCG AGTCATTCTGT TCTGTGGAGG GACAAGTGGAA CTCAGGGCAG 60  
 CGCAGGCTGA CCACAGCACA GCCAACACGC ACCTGCCTCA GGACTGCGAC GAAACCGGTG 120  
 GGGCTGGTTC TGTAATTGTG TGTGATGTGA AGCCAATTCA GACAGGCAAA TAAAAGTGAC 180  
 CTTTACACT GAAA 194

SEQ ID NO:2174

LENGTH:192

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02483

## SEQUENCE DESCRIPTION:

2153480

GATCAAATGG AAAGGAGAGG AAAGAACTCA GTGCTGCCTA TTAGTAGTTA ATTCTGTAC 60  
TCACCACTAC ATCACTTGAG ACAAACTAT GCCACTCAGA ATCTCCTCTT TTCCCTGGACT 120  
TAACTCTAA TCTAGAGTCT CTGTTACTGC TTGGGCTATA CCTGGGCATA CTAATAAAAGT 180  
ATGGTATTGA AA 192

SEQ ID NO:2175

LENGTH:192

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02484

SEQUENCE DESCRIPTION:

GATCAGAACT GTTACCAAAA AACAACTGTC AGTTTATTG AGATGGAAA AATGTAAC 60  
CGANNNTTAT TACTTAAGAC TTTATGGGAG AGATTAGACA CTGGAGGTTT TTAACAGAAC 120  
GTGTATTTAT TAATGTTCAA AACACTGGAA TTACAAATGA GAAGAGTCTA CAATAAATTA 180  
AGATTTTGA AA 192

SEQ ID NO:2176

LENGTH:187

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02486

SEQUENCE DESCRIPTION:

GATCGTCTTG GAAGGGAGTG GTTTTCAGAG ACATTTCAGA AAGTGAAGGA GAAACTCAAG 60  
ATTGACTCAT GAGGACCTGA AGGGTGACAT CCCAGGAGGG GCCTCTGAAA TTTCCCACAC 120  
CCCAGCGCCT GTNCTGAGGA CTCCCTCCAT GTGGCCCCAG GTGCCACCAA TAAAAATCCT 180  
ACAGAAA 187

SEQ ID NO:2177

LENGTH:187

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02487

SEQUENCE DESCRIPTION:

GATCATTGAA ATGCTAAAAA TTTAACAGT CTTCTAAAAA GTATTGAGGG GGCAAAAATT 60  
ACCAATTATG GTATACAAAAA ATAAGCCTAT AAATGTNTTT CACATTGCTA ACTTGAGTTT 120  
CAGTTGATTC AGTTGTAAT AACTAGTAAT GAGCTTCTGT TTACAATAAA AATNCTGTAA 180  
ATTGAAA 187

SEQ ID NO:2178

LENGTH:186

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02488

SEQUENCE DESCRIPTION:

GATCAGTTGC TTATAGATAA TGTTCAATGA CCTCAAGACA TATATTTTG AGAAATTATC 60

00841

**2153480**

ATTTAAAAAA ATTTGGTCTA TACTGATTGT TTTCAGTGAT TCCAATATTA TTACTTATAA 120  
CACTGACCTC TGGAAAATAT TTTGTNCACA AGAAATAATA AAGTATAATG ATTTGTNGCA 180  
NNNAAA 186

SEQ ID NO:2179

LENGTH:179

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02489

SEQUENCE DESCRIPTION:

GATCCACAAG GCCTGAGGAG CAGTGTGGGG GGACAGACAG GAGGTGGATT TGGAGACCGA 60  
AGACTGGGAT GCCTGTCTTG AGTAGACTTG GACCCAAAAA ATCATCTCAC CTTGAGCCCA 120  
CCCCCACCCNC NTTGTCTAAT CTGTAGAAC TAATAAATAA TCATCCNTNC TTGCCTAAA 179

SEQ ID NO:2180

LENGTH:179

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02490

SEQUENCE DESCRIPTION:

GATCCAATGG AGCCTGGNGA GGTGTGCCA GAAAGCTTGT CTGTAGCGGG TTTTNTGAGA 60  
GTNAACACTT TCCACTTTT GACACCTTAT CCTGATGTAT GGTTCCAGGA TTTGGATTT 120  
AATTTCCAA ATGTAGCTTG AAATTCAT AAACTTGCT CTGTTTCT AAAAATAAA 179

SEQ ID NO:2181

LENGTH:177

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02491

SEQUENCE DESCRIPTION:

GATCTGTCCA CTCCTGGTCA TTGGTGGATG TTAAACCCAT ATTCCCTTCA ACTGCTGCCT 60  
GCTAGGGAAA ACTGCTCTC ATTATCATCA CTATTATTGC TCACCACGT ATCCCCTCTA 120  
CTGGGCAAGT GCTGTCAAG TTCTAGTTGT TCAATAAATT TGTTAATAAT GCTGAAA 177

SEQ ID NO:2182

LENGTH:176

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02493

SEQUENCE DESCRIPTION:

GATCAAAAAA CCACAGGGCT TTTGGGACT GCCTCCTTGG GAAGTTAGTG GCCACAGAAG 60  
AGAGATGAAA CCTGTAAAGAA GTCTGGAGTC TTTGGAACG TCAGCCATT CCCCAGGTTG 120  
TTACTTCTT AGTATGTACA GTCTTCTCAG GATGAGCAGT AAAACCTTG AACAAA 176

SEQ ID NO:2183

**00842**

2153480

LENGTH:175

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02494

SEQUENCE DESCRIPTION:

GATCCTAAC TCTCTAGCTT AAGTGAAAT GAAGTACAGT AGTTCCCTA CTGAACCCTA 60  
CCTCTTGCTG CCTCTGAAACC TTCTAGAACCA CCTGCCTCT ACCCTCTGGT TGGGAGATGC 120  
AGCCACCAACA TCCCTTCATA TCATACTGTT TTGAATAAAAT TTTCAAATCC TTAAA 175

SEQ ID NO:2184

LENGTH:166

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02495

SEQUENCE DESCRIPTION:

GATCCGGAGG GCCCAGGAGA ACCGGAGCGT GCTTCAGGGT GCCCGCAGAA CAGGAGCTGC 60  
TCAGCCAAGA ACTGTGGCGG CGGCTGCTGC CAGGATGCCG AAGATACCCC ACTAGCACCC 120  
CTNAGGGGGT CATGTGGTCA ATAAAAGTCC TTAGCTGCTG CCTAAA 166

SEQ ID NO:2185

LENGTH:164

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02496

SEQUENCE DESCRIPTION:

GATCAAATC AAGAAATCCG GGCATCACAG AGAAGTTGGG TTTAGGACAG CAGGTGCTGT 60  
TCCGAGACTC AGTCCTAAAG GGTTTTTTT CCCACTAACG AAGGGGCCCT GACCTCGGGA 120  
TGAGATAACA AATTGTAATA AAGTAACCTC TCTTTCTTC TAAA 164

SEQ ID NO:2186

LENGTH:164

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02497

SEQUENCE DESCRIPTION:

GATCAGCCCC TTAAAATNAG TTCTAGAGCA GGTCTTCTGT TCCAGAAGGG GAGAACATA 60  
GAGGGCCTGT GAGCTCACGT GTGTTCTTG TCATAGGGGT GAAAAACTAA CTTCAAGTGT 120  
CCCTTGTTC AAATAAACTT AGCAGAGTCA CTTCTATCT TAAA 164

SEQ ID NO:2187

LENGTH:163

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02498

SEQUENCE DESCRIPTION:

00843

2153480

GATCTAATGG TTTTATAAAT NAAAGTTCCC CTGGACAAGT TCTCTTGCC GCCACCATGT 60  
AAGATGTACC TTGCTACTC ATTACACCTTC TGTATGATG GTGAGGCCTT CCCAGCAATG 120  
TGGAACTGTG AGTCCATTAA ACCTCTTCC TTTATAAATT AAA 163

SEQ ID NO:2188

LENGTH:162

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02499

SEQUENCE DESCRIPTION:

GATCCTAACCG AGGTAAACCTG GTCTNTGAA TTGAAGCTTA TCATATACCC AAAGCCTTGA 60  
CTAGAAATAC CAAATAGAA TACCATGGTC ATTGGAAAAA ATAGATAGTN TTNTAAAGTA 120  
TTATTTNAAT AAATCCTAAA GTNTGTCTNT CTTCTCCTCA AA 162

SEQ ID NO:2189

LENGTH:154

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02500

SEQUENCE DESCRIPTION:

GATCCTGGCC ATGAATGAAA AGGATAAGAA GAAAGAGAAG AAATGAAGTG ACCATCCAGC 60  
CTTCCAAT NAGACTCCT CTCCTCCAC CCCTCATTTC CTTTTGCAC ACATTACAGG 120  
TGGTGTGTC TGTGATAATG AAAAGCATCA GAAA 154

SEQ ID NO:2190

LENGTH:154

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02501

SEQUENCE DESCRIPTION:

GATCAAAGCC AGCNACCCCC ACCCAACAC ACTCGGTGTC CCANTCATA TAGGCCCTGT 60  
GTAAATCCCA GCCTGCCAT ACCCTCAACC TCAGTGGGCT GGAAATNACA GTGGGCCCTA 120  
TAGCAGTGGC AGAATAAACT CAGNTGTGTT CAAA 154

SEQ ID NO:2191

LENGTH:153

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02502

SEQUENCE DESCRIPTION:

GATCGCCCCA CTGCAATCCA GCCTGGGAGA CATAATTCAA ATCTATTG GTCTTATATC 60  
TTCTTATGTT TGTGTTATT CATGTGTGCC AGTTCTCTT TTTTCACAA CAATTATCA 120  
ATTTGTGGCA ATAAAAATNA TTTACCTTT AAA 153

SEQ ID NO:2192

00844

2153480

LENGTH:151

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02503

SEQUENCE DESCRIPTION:

GATCATGGTG ATTTTACTGC TGCTTGTGGC TATCGTGGTT GTTCAGTCT GGCCGACCAC 60  
CAGCAGTNAC ACCTGCCAAT NACAGATGCA AGCCCAACAC CCTTTGGA CGCAAAACCT 120  
GCTCTCAATA AATTCCCCA AAGCTCTGAA A 151

SEQ ID NO:2193

LENGTH:371

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02504

SEQUENCE DESCRIPTION:

GATCCCAGGA ACCTTCCTNC TCCAGGGCAG CACAGGACTC AGCCATGTNT GGACCGGCC 60  
TGCTGAGGCT ACAGTCACTC TGGAAGCTCT GCGCTTCATC AGGNGGCAGG ACTGTGGCGG 120  
GAGGGGTCTC TGAAGATGGG TGTGGGGAGC AGTGGGTCAG GAAGTGGGAG CCAGAGGTTT 180  
GACTCACTT GCTTTATTT TCAGGCTACA ATACAGGTCA GAGACAATGG CTTATAAAGG 240  
TTTAGTGTGG TCTCAGGATG TGACAGGCAG TCCAGCCTGA CCTTTCTGCA CACTCCAGAC 300  
AAACTTCCA GACAAGCTCC TTTGTGCCTC TACGTGGAGA GGGTGTGGGA AAGTTATCAC 360  
ATTAAAAGGT N 371

SEQ ID NO:2194

LENGTH:147

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02505

SEQUENCE DESCRIPTION:

GATCAAGAAA GAGATGGAGG AGGAGGACTG AGCCCAGAAT TCACTAGGTT CGAACCTCAGA 60  
NAGCAGTGTG GAAAAAAAACCAAAANC AACTGNCCAG TTGTTGATAA CCACTAAGAG 120  
TCTCTATTAA AATTACTGAT GCAGAAA 147

SEQ ID NO:2195

LENGTH:145

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02506

SEQUENCE DESCRIPTION:

GATCTGTGTC ATTNCATG AGGGGCCGGG GCAGGTGGCT GGGTGGGGC ACAGGCTGGA 60  
GTATTCTNAG TTCTACTGGT TCTACACTGT GAGGTGGCAA TGGGATTGTC TCAGATGCCA 120  
CCCAATAAAA TGCCTGTAAC TTAA 145

SEQ ID NO:2196

LENGTH:144

00845

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02507

SEQUENCE DESCRIPTION:

GATCGCTACT CTTAAGAATA TACATGTATG TATTCA TAGG AACATTTTT CTCATATTT 60  
GTATGATTG CTTACTGTTA TTGTGCTGAG TGAGCTCCTG TGTGCTTCAG ACAAAAATAA 120  
ATGAGACTTT GTGTTACGT TAAA 144

SEQ ID NO:2197

LENGTH:143

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02508

SEQUENCE DESCRIPTION:

GATCAGCTGG AAGCTCACTA GTCATCTCCT GCCAATCCC CAGAAACCT GATTCA GGTC 60  
TGCAGGCTCC TGCAGGCTCA CCACGGCTGC TGGCTCCGGT ACCATGTAAN NCCTAGGAAG 120  
GTAAAGGNGC AGGCAACCTC AAA 143

SEQ ID NO:2198

LENGTH:141

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02509

SEQUENCE DESCRIPTION:

GATCCAGTGA GATAGAATAC ATGTAAGTNT GGTTTTGTAA TTTAAAAAGT GCTATACTAA 60  
GGGAAAGAAT TGAGGAATTA ACTGCATACG TTTGGTGTG GCTTTCAAA TGTTGAAAA 120  
TAAAAAAAT GTTANGANAA A 141

SEQ ID NO:2199

LENGTH:137

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02510

SEQUENCE DESCRIPTION:

GATCCCTTGT GGCTATGCAG ATACCTACCT CACAGAGTTG TTGTAGAAGA CTGGTGGTTT 60  
GGTTCAAACC TTGTGATTAA AGAGTTGTC AAGCATTAA TTCTTTGAA TAAAAGCAAC 120  
ATATCNAAA CATTAA 137

SEQ ID NO:2200

LENGTH:135

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02511

SEQUENCE DESCRIPTION:

GATCCCTGTT TAACTCCAAA TTACAGTCGG ACTTGGATAC ATCATTGTA ACATTGTAGG 60

00846

2153480

AAAGAAAAAA GTCTGGTTN TGAAAAACGA TTTGCATTTG GGTAAAATAA AGTGACCATG 120  
CTTTGTTCT GTAAA 135

SEQ ID NO:2201

LENGTH:135

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02512

SEQUENCE DESCRIPTION:

GATCCAGCTC AAGTGCCATC CTGCCAGTGG CCCCCAGACT GTGGGGTTGG GACGCCTGGC 60  
CTCTGTGTC TAGAAGGGAC CCTCCTGTGG TCTTTGTCTT GATTTNCTT AATAAACGGT 120  
GCTATCCCCG CCAAA 135

SEQ ID NO:2202

LENGTH:133

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02513

SEQUENCE DESCRIPTION:

GATCACTACT GCTCTGGAG TTCCTTCTCC TAAAGCTAAG GCCAGCCTCC ATCACAAATG 60  
CCCATAAAAT CTGGCTCGTC TTTGATGAAC AATAAATATT TNTTGAACAA ATAATAACT 120  
GCCCTGCATT AAA 133

SEQ ID NO:2203

LENGTH:138

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02514

SEQUENCE DESCRIPTION:

GATCCTCCCG CTGGCTTCCA GACAGACCTG GGATTTGGC AGTCATGCCG GGTGATGGT 60  
TTCCTGCGGA GACCCTCAGT TGTCTTATTC CTTCTAGCT TCCCTGCAAT AAAATCAAGC 120  
TGCTTTGTT GGAATAAA 138

SEQ ID NO:2204

LENGTH:130

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02515

SEQUENCE DESCRIPTION:

GATCATTCA CCTGATGTTT TTAAAGCATIC CTAAGTACAG TAGAGTAGAA AACTNATTTC 60  
TTTGTAAATT GTACACTGAA TAATGCCTTT AAAAAATCAA AATAAAATTA ACAAATAATG 120  
GTGAATGAAA 130

SEQ ID NO:2205

LENGTH:176

00847

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02516

SEQUENCE DESCRIPTION:

GATCCCTAT GTTACCAATG TGTATCGTCT CCTTCTCCCT AAAGTGTACT TAATCTTG 60  
TTCTTGCA CAATGTCTT GGTTGCAAGT CATAAGCCTG AGGCAAATAA AATTCCAGTA 120  
ATTCGAAGA ATGTGGTGT GGTGCTTCC TAATAAAGAA ATAATTAGC TTGAAA 176

SEQ ID NO:2206

LENGTH:130

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02517

SEQUENCE DESCRIPTION:

GATCATGTTA TGAATTGTA ACATTCACAC AACACCTCAC TTTTNAATCT ATAAAAGAAT 60  
TGCACTGATG ANAACCTAT ATTTNAATAC TGCTGAAACA GACATGAAAT AAAGAATTAA 120  
AAGAATGAAA 130

SEQ ID NO:2207

LENGTH:128

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02518

SEQUENCE DESCRIPTION:

GATCTAGCTT CTGGCTCTGT GTGTTTATTG ACCAGTGGTG TGCCTTGAGA AACCGAACT 60  
CTCTGAATTT CAGTTTGTC TCTNTNTAAA TGAAGAAGGT TGTAATAAAA AAAATCTCAA 120  
GTTTCAAA 128

SEQ ID NO:2208

LENGTH:349

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02519

SEQUENCE DESCRIPTION:

GATCCGTCA GGNCAACGAG AAGCACAGCA AGAACATCAC CCAGCGCGGC ATACGTCGCC 60  
AAGACCTCGA GAAATGCCCG CGAAGAGAAG GCGTCTGTAG GCCCTGGTTA TTGGCTCTCT 120  
TCACTTTGT NGCTGTGGT TCTGCAATT TCCAGATTAT TCAAAGTATC AGGATGGGCA 180  
NNTGAAGTGA CTGACCTTAA NTGTTCCAT TCTNCTNTGA ATTTAACTTA ACTCATTCC 240  
GATGTTGAN CCCTGGTTNA ACAATTCACT AAANATCTGC TAGAATNCCT NCTATCATNT 300  
TCATGTGCAT TCAAGNTTCT CATNGCATCC ANGTTCTAGN CAACACAGN 349

SEQ ID NO:2209

LENGTH:127

TYPE:nucleic acid

TOPOLOGY:linear

00848

2153480

CLONE:HUMGS02520

SEQUENCE DESCRIPTION:

GATCACCAAGG CAGCGACCTC CGCNCACCCC AGCAGTCGCG AGCCTCGGCC CAGCCANAGG 60  
AAGCGNTGCC GNCGGACCTG ACTGACTTCC CAGTGGAACT GCCTTCTTNG GCTGGGACAG 120  
CCNTTTN 127

SEQ ID NO:2210

LENGTH:126

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02521

SEQUENCE DESCRIPTION:

GATCTGGGCC ACTTCCCTCC TTCCAGTCAT GAGTAATCAT CAAGGAGCAA GTTGGAGTGT 60  
TTCAGGTGTA TATTTGTAG AACCCAAAAG ATTGGAGCCT TAACAATAAA CATCAGCACT 120  
AAGAAA 126

SEQ ID NO:2211

LENGTH:126

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02522

SEQUENCE DESCRIPTION:

GATCTTCAT AAAGCAGAAC GGTACGTATC GGATTGTTTT AATGTTATAT ATTGGATTGT 60  
ATTCGTTGTT ACAAAACCAA TATTCTATGG AGAATGAAAA AAATAAAGGA CTAAATTAAC 120  
TGGAAA 126

SEQ ID NO:2212

LENGTH:127

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02523

SEQUENCE DESCRIPTION:

GATCTCGCAA AGTTATTCTT CCACCATGGC CAACAAACGAA GGACTTTCT CCCTGGTGGC 60  
GAGGAAGCTG AGCAGACCCC TGTGATGCCT GTNACCTCAA TNAAAGCAAT TCCTTGACC 120  
TGTCAAA 127

SEQ ID NO:2213

LENGTH:125

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02524

SEQUENCE DESCRIPTION:

GATCAATGTA CTTTTATAA ACTTGCATA GATATCTAG ATTTGAAACC TCAAGACAGA 60  
TTTATTATTC TAAATGCTG TATGATAATG AAGAAAAATA AAAATTATT TCTTGCAAAG 120  
TTAAA 125

00849

SEQ ID NO:2214

LENGTH:121

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02525

SEQUENCE DESCRIPTION:

GATCAGTTG GAGAGTAGGG GGCCACTCAT ATTCTGGGCT CCTGGAACCA ATCCCGTGAA 60

AGAATTATT TTGTGTTCT AAAACTATGG TTCCAATAA AAGTGAECT CAGCGAGCAA 120

A

121

SEQ ID NO:2215

LENGTH:124

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02526

SEQUENCE DESCRIPTION:

GATCCCCGCA TGGTGTGGG GGTGCTGGTG TGTCTGGTG CCTGGACTTG AGTCTCACCC 60

TACAGATGAG AGGTGGCTGA GGCAACCAGGG CTAAGCAATT AAACCAGTTA AGTCTCCCAG 120

GAAA

124

SEQ ID NO:2216

LENGTH:120

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02527

SEQUENCE DESCRIPTION:

GATCAAAAG GGGTCTGAGG TTGCATCAGG GAGACAAC TG TAATGATATA AGCAATAGTT 60

GAGAACCTGA CAGCAAGTAA TAAGACAGGA AGAATAAAC TAGAAGAAGT CAGAATGAAA 120

SEQ ID NO:2217

LENGTH:120

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02528

SEQUENCE DESCRIPTION:

GATCTGAGTT CTGAGCAAGT CAGACTCCTT CCTTTGGCC TCCAAAGCCA CAGATGTTGG 60

CCGGCCCCACC TGTAACTC TGTATTATT TCCAATAAA GAAGGGCTTC CAAAGGCAA 120

SEQ ID NO:2218

LENGTH:120

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02529

SEQUENCE DESCRIPTION:

GATCGGAACT GTAAAGCTAT AATCCCCAGA ATTAAAGTTT TTATTATTT TTATACATTG 60  
TAAAACATAG ACGTTTATTT ATGTGATTAA NTTCTATTAA AATTTACATG CTAAANTAAA 120

SEQ ID NO:2219

LENGTH:115

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02531

SEQUENCE DESCRIPTION:

GATCCAGTTT TTCTTGGAG GTTGATCTG GTCATAAGGT AAACATTCTA TATATTCTAT 60  
GCCTGCTCTA GAATTGAAAG ACTTCAGCAG TATTAAAGCA TTTTTAATC TTAAA 115

SEQ ID NO:2220

LENGTH:122

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02532

SEQUENCE DESCRIPTION:

GATCTGTATT TGTTATGCT GATGCAATGA TAAAAATCAC TGTAATAGNT TCATTGTGTT 60  
GTACTGGATG CAAAGCTAGA AAATATTGCA ATANNTGAGA CCGATGAAAG ACTTCTCTGA 120  
AA 122

SEQ ID NO:2221

LENGTH:110

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02534

SEQUENCE DESCRIPTION:

GATCTTGGGC AAGTTAATCT CTGGGAACCT TGGGTTCTT ATCCTAAAA AAGGCGATGG 60  
AAGGNCTGGG NCNCGTGATT AAATAAAAGC AACGCAAGAA AAATGCCAAA 110

SEQ ID NO:2222

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02535

SEQUENCE DESCRIPTION:

GATCGATGGT ACTTTTGAA AATGCTTTAT TGCAAAAAAG TGGCTAGGGT TTTACAAGGN 60  
CTATGAAGAA ACATATTAAG GTTAATAAAG CTTTTTATTG AGTGTAAA 109

SEQ ID NO:2223

LENGTH:105

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02537

2153480

SEQUENCE DESCRIPTION:

GATCCTCCCT TAGAGCATTT GGAAGAGTGT GGCCCTGCCA ACACCTTGAC TTCAAACCTTC 60  
TGGCCTCCAT AACTATGAAA TAAATNCTTG TTGTTTAAG CCAAA 105

SEQ ID NO:2224

LENGTH:108

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02538

SEQUENCE DESCRIPTION:

GATCTGTCCA CTTCTGGTGT CAAAGATTTC ACTCATCTTC TTAGTACATT CTATGTATTT 60  
NATATGTATA ATTTTATACA ATTAAAAATA GATTTNGTC TAGTGAAA 108

SEQ ID NO:2225

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02540

SEQUENCE DESCRIPTION:

GATCTTATAT CATTACAGTA GCCTTTTGT AGAACATCCTC CTATTTCCA CATGGATAAT 60  
CATGTCATGA AGAATAAAGA CAGTTTACT TCTTCCTTA AA 102

SEQ ID NO:2226

LENGTH:100

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02542

SEQUENCE DESCRIPTION:

GATCCCAGGG GAGGGGTCTC TCCTCCCACC CCAAGNCATC AAGCCCTCT CCCTGCACTC 60  
AATAAACCT CAATAAATAT TCTCATTGGT CAATCAGAAA 100

SEQ ID NO:2227

LENGTH:97

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02543

SEQUENCE DESCRIPTION:

GATCTGCTGC TTCCAAGTTG TGTGACCTTG GCTAAGTCAC TTAACCTTC TGATTGTCAT 60  
TTCGCTTTT AATAAAGTGG GTCTGGTGAA CAAGAAA 97

SEQ ID NO:2228

LENGTH:97

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02544

00852

2153480

SEQUENCE DESCRIPTION:

GATCCCAC TG TATGGCTATA CGGTATTTA TCAGTGCATC CACTGTCGGG TTTTCCCT 60  
TGTGGACTAT TATGAATAGT GGACGCTTGT GTGAAA 97

SEQ ID NO:2229

LENGTH:94

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02545

SEQUENCE DESCRIPTION:

GATCAGGTGA GCTGTGTCCA GAAAACCAAC GAGAAGGAGT GGAAGGAGGA ATGAACGTTT 60  
CATTCTCGTT AATAAAGGCA TTATCCTAAT TAAA 94

SEQ ID NO:2230

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02546

SEQUENCE DESCRIPTION:

GATCTAAC TCTTCTGGGG CCTAACTCA TGGGAAAACA GAATTATCCC CTAGGACTCC 60  
TTTCTAAGCC CCTAATAAAA TGTCTGAGGG TGTCTCATGA AA 102

SEQ ID NO:2231

LENGTH:93

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02547

SEQUENCE DESCRIPTION:

GATCATATAT TTGTGGCATA CAGTGTGATG TTTTGACATG NATATAATT TGTATACAAT 60  
GTGGAATGAT TAAAACAAGC TAATTAACAT AAA 93

SEQ ID NO:2232

LENGTH:92

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02548

SEQUENCE DESCRIPTION:

GATCTGCACT TCCTCCCTT TCACCTACCT GTACACCTAA CCTGGCCTTA GACTGAGCTT 60  
TATTTAAGAA TAAAATCGTG GTGGTGGTCA AA 92

SEQ ID NO:2233

LENGTH:91

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02549

00853

2153480

SEQUENCE DESCRIPTION:

GATCAGTGGC TGCTGGGTGG CGGGTACCCCT TNCTCAGATG CCTGGCAGGN CTGGNTGGCG 60  
ATTCAAAAG ACCTCGTGTT GATTCCCCAA A 91

SEQ ID NO:2234

LENGTH:89

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02551

SEQUENCE DESCRIPTION:

GATCTAACCC CTTACCCATC TNTCTACTGC TGGACTGTGG AGGGTCACCA GGTTGGGAAC 60  
ATGCTGGAAA TAAAACAGCT GCAACCAAA 89

SEQ ID NO:2235

LENGTH:88

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02552

SEQUENCE DESCRIPTION:

GATCTTTTG AGAGAAACAA ATGAGGATTG TAAAGTTGG GGACTTACCT CTGTAGCATT 60  
GTGAAAATAA ACTTTGATTA AGCTGAAA 88

SEQ ID NO:2236

LENGTH:88

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02553

SEQUENCE DESCRIPTION:

GATCACCTCG GCGTCTGTT TGTATGCTCT TTACCTATGG ACTAGTTGT GGACGGCTAA 60  
GAAATACAGC CTCAGCATTG ATTTGAAA 88

SEQ ID NO:2237

LENGTH:88

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02554

SEQUENCE DESCRIPTION:

GATCTTAAGG AGTGTAAATTG GCAATCTAAT TTTATCCTCT TACTCTGTGT TGTTAACCA 60  
TATACAATAA ACGGTGTTA TGGAGAAA 88

SEQ ID NO:2238

LENGTH:96

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02555

00854

2153480

SEQUENCE DESCRIPTION:

GATCTGGCTG TGAGGCCCTC AGGGCAGGGA TACAAAGCGG GGAGAGGGTA CACAATGGGT 60  
ATCTAATAAA TACTTAAGAG GTGGAATTG TGGAAA 96

SEQ ID NO:2239

LENGTH:86

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02556

SEQUENCE DESCRIPTION:

GATCCGGGGA CCAGGGCTG ACCTCCATTG GTACCCCACT GCTTTGGAGN TGATGGACT 60  
ATCAATAAGA ACTCTGTTCA CGCAAA 86

SEQ ID NO:2240

LENGTH:90

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02557

SEQUENCE DESCRIPTION:

GATCAAACCA TTTNACCTGG AGTTTGGTAC TGGTTTTAAC TTCTCTNAAT CTGTATAAGA 60  
AAAATGAAGA CAATTGAACT TTCAAACAAA 90

SEQ ID NO:2241

LENGTH:85

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02559

SEQUENCE DESCRIPTION:

GATCCAAGTT TTGCGGGGTC TAAAGCTGTG TGTGTTGAGG GGGATACTAA GTTTATGAAA 60  
AAGAATAAAA AACACAACCA CGAAA 85

SEQ ID NO:2242

LENGTH:84

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02560

SEQUENCE DESCRIPTION:

GATCTCGCCA CTNTTCTCCA ACCTGGCAA TAAAGCAAGA NCCTGTCTTC AAACAAGCAA 60  
ATAAAAAACTT CCTTATCCTG CAAA 84

SEQ ID NO:2243

LENGTH:80

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02562

00855

2153480

SEQUENCE DESCRIPTION:

GATCCTGTTA GCTTCTGAA TGTCTGTGG TTGAATGTGT TTTGCTAA ATAAAGCTT 60  
TGGTATTGT TTAAATTAAA 80

SEQ ID NO:2244

LENGTH:79

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02563

SEQUENCE DESCRIPTION:

GATCCCAACC GTTTGGCACA GCTTGGCCA CAGCCAGGCC CCTCTGGAAT TGTCCATT 60  
AAACCAAGTTT CCCGAGAAA 79

SEQ ID NO:2245

LENGTH:78

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02564

SEQUENCE DESCRIPTION:

GATCCGGGTC AATGCTTCGT TTTCTAAAGG ATGCTGCTGT TGAAGCTTG AATTTACAA 60  
TAAACTTTT GAAACAAA 78

SEQ ID NO:2246

LENGTH:76

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02565

SEQUENCE DESCRIPTION:

GATCTTGGTT TTCCATGAAT ACAGCATGTA TAATAAAAT TTTAAGAAAT AAATGTTATT 60  
CTACTTTATT AACAAA 76

SEQ ID NO:2247

LENGTH:74

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02567

SEQUENCE DESCRIPTION:

GATCTTCTGC CGGGCGTGCC CCAGAGGACA GTGGGTGGAG TGGTCCTACT TATTAATGT 60  
CTCAGCCCCCT CAAA 74

SEQ ID NO:2248

LENGTH:73

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02568

00856

2153480

SEQUENCE DESCRIPTION:

GATCTCACCT TTGCAAAGTT GGATAGTCAA TTTGTTTTA GAGGAAATAA AACACTTATT 60  
CTGTGATTT AAA 73

SEQ ID NO:2249

LENGTH:73

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02569

SEQUENCE DESCRIPTION:

GATCTGGAGA GAAAACATT CAAACCATTG CATCATACAA AAAAAAGGCT ATTAAAAATT 60  
GGATTATAGC AAA 73

SEQ ID NO:2250

LENGTH:72

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02570

SEQUENCE DESCRIPTION:

GATCAGAGTA AGAACATCTT AAGAAGAGGT TTGTAAGGTC TTCATAACAA AGTGGTGT 60  
GTTATTTACA AA 72

SEQ ID NO:2251

LENGTH:74

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02571

SEQUENCE DESCRIPTION:

GATCAAATCT GTACAGTTTC TATTGTTCCA GATTTTTTA AGTTTGATT AAAAGCATGA 60  
TACATAATAG TAAA 74

SEQ ID NO:2252

LENGTH:71

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02572

SEQUENCE DESCRIPTION:

GATCTTTCA GTGTTTTTC ACTTTAGCTA TGTGGATTAG CTAGAATGCA CACCAAAAAA 60  
ATACTTGAGC N 71

SEQ ID NO:2253

LENGTH:71

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02573

00857

2153480

SEQUENCE DESCRIPTION:

GATCCAGGAG GGAGCCACCC CCAAGGACCC TGCCAGCCAC AGACCTCCAA TAAAGACAGC 60  
ATGGAAACAA A 71

SEQ ID NO:2254

LENGTH:71

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02574

SEQUENCE DESCRIPTION:

GATCTGATGT GAATTCAAGAT TTCCAATCTT CTCCTAGCCA ACCATTTCC TGGAATNAAA 60  
AATTCAAGTAA A 71

SEQ ID NO:2255

LENGTH:69

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02575

SEQUENCE DESCRIPTION:

GATCCAGAAG TTCTAAATCC AGGATTTAA TTAGTAAC TC AAATAAAATG CCACACATTT 60  
TCATACAAA 69

SEQ ID NO:2256

LENGTH:69

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02576

SEQUENCE DESCRIPTION:

GATCATAGTA GTGCCGCTGT TGAGTGATAA AGCAACTTGT CATTAAGAT GTGTGTNCAG 60  
ACATGGAAA 69

SEQ ID NO:2257

LENGTH:69

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02577

SEQUENCE DESCRIPTION:

GATCCCAGCC CAAATNNGCC CATTACACACA ATCAGGAGCN AAATAAATTA CTGTTGTCTT 60  
AACACTAAA 69

SEQ ID NO:2258

LENGTH:68

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02578

00858

2153480

SEQUENCE DESCRIPTION:

GATCTTCAGC TGTTGCCCG TNCTTATTAC ATAAACTGAA AACAGGATAA AAACGGAGTG 60  
CAATGAAA 68

SEQ ID NO:2259

LENGTH:63

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02580

SEQUENCE DESCRIPTION:

GATCTGTCAA AGATATGAAC ATGAAAGAAC AGCTTATTTC AATAAACCCA CTTTACATAC 60  
AAA 63

SEQ ID NO:2260

LENGTH:63

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02581

SEQUENCE DESCRIPTION:

GATCAAAAGT AAATGTCTC TTTGCCATT TAGATGGAAA AATAAAAAAA ATTAAAAAGT 60  
AAA 63

SEQ ID NO:2261

LENGTH:86

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02582

SEQUENCE DESCRIPTION:

GATCTACATG AAGGAACGT AGATGATGTA TTTTTTCAT CTTTTTGTT AACTGATTG 60  
CAATAAAAAT GATACTGATG GTGAAA 86

SEQ ID NO:2262

LENGTH:60

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02583

SEQUENCE DESCRIPTION:

GATCCCTTT TTATTTGTG GTTTTTAAT ATAGTATAAA AATCCTTTA AAAAAACAAA 60

SEQ ID NO:2263

LENGTH:67

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02585

SEQUENCE DESCRIPTION:

00859

2153480

GATCAAAACA GGATTCATT GACCTAATTA TATTAAGCTA ATAAACTAAT TTTTGATT 60  
TTTGAAA 67

SEQ ID NO:2264

LENGTH:58

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02586

SEQUENCE DESCRIPTION:

GATCAATATT TATTGACTTG TAGTAACTGC CACCAATAAA GCAGTCTTA CCATGAAA 58

SEQ ID NO:2265

LENGTH:55

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02588

SEQUENCE DESCRIPTION:

GATCAATAGA CTGTACTTAT TTTCCAATAA AATTTCAAA CTTTGTACTG TTAAA 55

SEQ ID NO:2266

LENGTH:53

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02589

SEQUENCE DESCRIPTION:

GATCATTCTC AGTATCCACT GTCTATGTAC AATAAAGGAT GTTTATAAGC AAA 53

SEQ ID NO:2267

LENGTH:53

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02590

SEQUENCE DESCRIPTION:

GATCCATTN TTTTGTGAAT GTGCTAAATA AAAAGTGTAA TNAATTGCTG AAA 53

SEQ ID NO:2268

LENGTH:52

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02591

SEQUENCE DESCRIPTION:

GATCCTGCAT CCCACTCCCT GGGAGCCAAT AAAGTGCATT TTCACAGGCA AA 52

SEQ ID NO:2269

LENGTH:50

00860

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02592

SEQUENCE DESCRIPTION:

GATCACAAAG TCAAAAACCC ATAAGAAAAA TTGAAAAAGC TACAAGCAAA

50

SEQ ID NO:2270

LENGTH:50

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02593

SEQUENCE DESCRIPTION:

GATCATATT TCTATTAAG TGGCTAACAC CTGGCTACTC TTACTGTAAA

50

SEQ ID NO:2271

LENGTH:290

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02612

SEQUENCE DESCRIPTION:

GATCTGAAA TAAAATCAGT GCACTGTGAA TCACACCCAG CCCCTTTCCC TGCTGTGTGG 60  
ATTAGGTGTC AAGACACCTA GTTCTTCTG GGGCCACCCG GCTGGCCTCA CTGCTTATAT 120  
TAAGGCTCT CCCAACTCTC ATTTCCCTT GGAAAACAAG ACTTTTTCC CCATGGTTAC 180  
CGCTGAGATA CTGGGGCTGT AGTAGTATAA AAGCTCACAG TTCCCTCTGA GTGCTGAAAA 240  
GAGTGATGA GTTGCTTCGA AATAAAAGGG TCAAGCATTG CTACCTGAAA 290

SEQ ID NO:2272

LENGTH:556

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02627

SEQUENCE DESCRIPTION:

GATCTGTGCT TCCNACTCAC ATGTNAGGCC ACGCCATCCT CTTGCTGAAN CCCTATTGAT 60  
GCTTTCTAAC AGGTTCTCGT GTCTCTCCCT GACCAGGCC TCTTACAGAC TGCAAGATT 120  
CCATCCACAG TGTACATTGG ATGAGAATGT GTCACCACCA TGCTTAGAAC CACTCCTATC 180  
ACTGACAGGT CAATATCTGA GCTCCTTGGC ACAACACACA TGTCCAGGG GTGGCCAGTA 240  
ATTAGTTGTG CCTGGAGTAT TGAGAGCATC AGTGGCCGGG AACATCAGGC AAGATGTGAT 300  
GTTTTAAAGA GCCTTGAATG CCATGCTAAG GACTTNGAAC TGCAATTGAC AGCCCATGGG 360  
GAGCTCTGGA AGGTTAAAAA GCAGNGAAGA NCCTTGCCTT TGTCTAAATT CTGTAAGTCT 420  
CAAGCACTTC TGCTTICCTT CATAGNACTT TGTAATTAT TTCAATTGGC TTGGTTNATT 480  
TTTNCNNNA TTTCCCTT AAATTCAAN GTTTTGGGC GGGATTAAT NNTGGCTTT 540  
TTGNTNCNT TTTAAA 556

SEQ ID NO:2273

LENGTH:527

00861

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02628

SEQUENCE DESCRIPTION:

GATCTGAACA TCTGGCCAA GTGAAGCATG GCATATAGTG CCCTTGGAAAG AAAATTAGGC 60  
CTCAAATGAC AGTAGCATTG AAGTGTTCGC TGCAAGAGTTG AGGGAAACCC CCAGCCACCC 120  
TCCCCGGAATC CGAGATAGGG TGGCACATCT GTCCGTACAG ACAGGAGGTG TAATNAACC 180  
AGGAATATTG CCTCCATTCC TGCTCTCCCA CTGCACACAG GGTGGTGGCA CATTATCCCT 240  
CTGGGGGGTG GGGACGCCCTG TTGTTTGGC TCAATTGGG TTTGTTGGTC ACATGGAGCT 300  
CTTCCATTTC GTTTAGCTGA ATAATGAGTT GTTCCTAGAG GAGACAGCCT GTCTCCCTT 360  
GTNNNCCNCA AAGCCCATGN CCTGNCGTGG TGGANCTGGG GCTTTGGNT GGGGAGGGGN 420  
CCCAACAATG GATNTTNTTN CCTTNCTCCG ATTCCAACG GANTNNAATG TNCAAAGGCC 480  
CTTNGAACAC TTGGNGGGAA ANTTAATTNC TNTNCCCTNG NNGTGGN 527

SEQ ID NO:2274

LENGTH:458

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02629

SEQUENCE DESCRIPTION:

GATCAGCAGC CAATATGGGT TTGTTGGTT TTTTAATTG TAAAAAACAN CCTNTAGAGG 60  
AATAGAAACA AATTTTATG AGCATAACCC TATATAAAGA CAAAATGAAT TTCTGACCTT 120  
ACCATATATA CCATTAGGCC TTGCCATTGC TTTAATGTAG ACTCATAGTT GAANTTAGTG 180  
CAGAAAGANC TCAGATGTAC TAGATTTCA TTGTCATTG ATATGCTAG TATGCTGCCA 240  
CATAGATGA ATTTAATNNN NNNCAGCCAA AGCAATATAC TCTTACATGA TTTCTAGGCC 300  
CCATGACCCA GTGTCTAGAG ACATTAATTG TAACCAAGTTG TTTTGCTNT AAATGAGTGA 360  
TTCCATTTC GGGGAACAGG TTCAAATGG ANTATATNTA CATGGTAAA ATTCCCTGT 420  
GCTAGTGTAG GNCTTCCTN GGGGAATGTT TTATGGGN 458

SEQ ID NO:2275

LENGTH:452

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02630

SEQUENCE DESCRIPTION:

GATCGACTAC AAGCCAGCCC CTANGCACCT GCTGCTACAT CATGAAGNTA NCTCCAGAGA 60  
GCATCCCCAG TCTTGAGGNT CTCAATAGAA AAGTCCACAA CTTCCAGGCC AAGCCCGCAG 120  
TGCCTACGTC TAAGCTGGC CAGGCAGAGG GNCGAGATGC AGGCTCAGCA CCCTCCGGAG 180  
GGGACCCGGC CTTCTGGGN NTNGCCGTNA NCACCCCTGTG TGGCAGGGTG CCGCTCTACT 240  
ACATCTAGGA CGNCTCCGGT GAGCAGGGTC AGTGGAAAGCC CCAACGGGAA AGGAAACGCC 300  
CCGGGCAAAG GGTCTTTGC AGCTTTGCA GACGNGCAAG AAGCTGCTT CTTCCCACAA 360  
CCGNAGGACC AAAACCCCTG GAGAAANTGN GNAGNTTGGN GGAGATGGAT TTGGGAGTTT 420  
GGCAANAGGG TTGGACCNA NGNGGGCCCG GN 452

SEQ ID NO:2276

00862

2153480

LENGTH:451

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02631

SEQUENCE DESCRIPTION:

GATCTTGGTT ACTTTGGAC ATCAAGCCCA TCACTGCCAG CCAGTNAAGA AGGATTCCAG 60  
CCTATGCCCT CAATCACAAAT AAGACCACCA GATGACCAAC ATCTTCCTAC TGCAAATACT 120  
TGCATTCTC GACTTACGT CCCACTCTAT TCCTCTAAAC AGATTCTCAA ACAGAAAATTG 180  
TTACTCGCCA TTAAGACCAA GAATNTTGGC NNNGTGTAGA GTATAAAAAG TGTGTATTGC 240  
TGTGTAATAT TACTAGAAA TTTGTAGAT TTTNTCCAT TTGTCTATAA AAGTTTATGG 300  
AAGTTAACATGC TGTCTACCC CCCTGGTGGT ACCTTAAAGA GATAAANTGC AGACATTCC 360  
TGCTGAGTT ATAGCTAAA AGGCCTAAGG GAGCACTAGC AANCATTTG GGCTATATTT 420  
GGGTTTGCTA GGTACCAAC TTCTGGGG N 451

SEQ ID NO:2277

LENGTH:446

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02632

SEQUENCE DESCRIPTION:

GATCCAGCCA GGCATCTCGG CGCTTGGCA CCATGAGTTC TATGTCTGGG GCCGACGACA 60  
CTGTGTACAT GGAGTACAC TCATCGCGGA NAAGGCGCCC AGCAAACATG TACACCCGCT 120  
CTTCAAGCGC TTTAGGAAAT NATNCTTAGG CAGGGTACTT CGTTCAAGAC CGGCCTTGG 180  
CACCCCTGTT GGAAAGGGNT TTTCAGCATA ACATTTCTT TCCACCTCT TGACCTTCCC 240  
TCCAGCGTTG GCCAAATTGT GCTGAGGAAG ATGCATCAAG NGNTGGCTG TGCCTTCATA 300  
GGTCATCTAG GGTTTATAA AGGAGGAGGA GACAATATTN NTCAAACTT TTTGGGAGT 360  
GGGGTCATTT TCTGATATA AANAATGTTA ATATTTAAGG TGTAGTTAT GTTACCGTTC 420  
TGAATAAACAA GATTNGCCA TTNAAA 446

SEQ ID NO:2278

LENGTH:425

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02633

SEQUENCE DESCRIPTION:

GATCCACACC TGACCCCTGTT GGGTCGAGTT AGGNTGGGCC TTGGTCTGCA CTGTAGCACC 60  
TNTGTTCTT GAGTCACAT CATGAATGTG GTGACTTNCC AGNTACCATA TCAGGCTTAA 120  
CCTAGCACAT CCTATTCTT TNCTCTATG ATATCCAAAT TGGACTGACC TCACTTCAA 180  
GTTGCTGTCC CATTGGTCA CCCTATCTT TCTGGGGAA ATTGCAGACT GATGGCCAGA 240  
CCAACTCTGT TGAAATTCTT GCATAGAGCA AACCTGTGCT CATTGTTAAG TGGCATGGGA 300  
GAGGCCGCCCA GCCTAGAAA GCCTAGTCTG TGTCTTCACA GTGCTGGTAG NATGNNTTT 360  
GTGTGTATAA ATATATGATA TAGGATTGAT AATATGTTNN CTAACGGCCA TATTATTGAA 420  
GGGCN 425

SEQ ID NO:2279

00863

2153480

LENGTH: 414

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02634

SEQUENCE DESCRIPTION:

GATCTGCCTT AACTCCAAT TACATGTTT GGTCACTATT ACAAACTGTC ATCCCAGAAT 60  
GATGCTGCAG AGGCTAGGGC TAGGACACAG ACCAGTGTT CCATGTGGGA ATTCCCTCCC 120  
AGTATTTCTT AGGAANNNTA TGTTTTGA ATCCATAATC CCTAGAAAAA TCAGTTGAGG 180  
AAATGAGAAG TATTGTAATT ATNCTGTGAA TAGTAACACT TACCATTATG GAGACATCAC 240  
TAGTTGAAA GANTCCAATC TCATCAAATN TTAACGTACC GAGTTGAAGG NTACAAGANC 300  
TGAGACAGGA GCATAGCAGA GGAGAAACGG TCACCATCTC ATTAGCCCTA TTTTTGGNT 360  
TGNTGTGATG CCATTACATC TGNAATAATC TGGGCCATNT CAGCTGCTAA TGGN 414

SEQ ID NO:2280

LENGTH: 293

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02635

SEQUENCE DESCRIPTION:

GATCTCACCT TCCTTCGAAT TCGCTCCAAG AAAATGAAA TTATGGTTGC ACCAGATAAA 60  
GACTATTTCC TGATTGTAAT TCAGAACCCA ACCGAATAAG CCACTCTT GGCTCCCTGT 120  
GTCATTCCTT AATTTAATGC CCCCCAAGAA TGTTAATGTC ANNNNNNGTCA GTGGACTAGC 180  
ACATGGCAGT CGCTTGGAAC CCACTCACAC CAATCCAGTG ACCGTGTGTG GGCTGGNGC 240  
TCTNTNTCCC NCNCCAACGG AACCCNGTG TGCACCAACC TTTNNNCAG AGN 293

SEQ ID NO:2281

LENGTH: 400

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02637

SEQUENCE DESCRIPTION:

GATCTGGCAG GGCACCCACAG CGCCCCCTAC TGAACCATCA GCATGTCAGT GGCATTAAA 60  
GCCATGCAGC TGGAGGGGCC ACTGAGATTG TCTCTGAGTA TTACTGAGAA GCAACAGAAA 120  
AGAGCCATGG ATGGAGCCCT TGGGCTCTCT GGGAAATGGG AAATCAGCCA AAGGACTGAG 180  
AAGGAGTTAC CTTAAGGTCA GAGAAAACCA AGAGAGTGTG GTGTTCTGGA AGCTGAGCTT 240  
TCTTTATTCA ACCTCATTC CTTCTCCAAA TAAGCCACTT GTGTAGTTGG GCCCCTCCAG 300  
GGTTGAAGGC AAGAGGAGAA AGGCACAGCG TTGGGAAAC AAGACTTTTC CTGCAATAGC 360  
CTGGGGAAAGG AATAAAANGG ATAGAGGTGT TTGGGGAAA 400

SEQ ID NO:2282

LENGTH: 400

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02638

SEQUENCE DESCRIPTION:

00864

2153480

GATCTGTCCA ACGCCTGCAG CGTGGATGTG GAGGC GGACT AATCACNAG TGCTCTGTTA 60  
TTATTCCTAC CCATCCCTT TCTCCATGCT AATTGCTTA GAACCTTAAC ATTGAATGGA 120  
CAGCAAATGT CATGTTCTGT TAAATTATCA CTCCTTGACC ATTATGTTAA TTTCTTCCC 180  
TAACAAGGTG ACGCATTGTT TAAAGTAACA ATGACCAACT CATCTACTCT TCTTCAAAT 240  
TGTGTAATT GAANGGTAA AATGTGGAA AACGCTAAAT TTGAATGCTA AATTGAAACA 300  
TTTCACACAA CCAATAATTT TGAAATGCTT CTTNGCAATA TTATNGCGGT TTCGGNACCA 360  
GGTTAAAAAT NNCTTCATT TTCAGGNAT TTTGGTCAAA 400

SEQ ID NO:2283

LENGTH:386

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02639

SEQUENCE DESCRIPTION:

GATCGATAAT ATAATTATA ATGAAATTGC TTTATCAGCT ATTAATGTTA ACTACATCAT 60  
CTTCATATAG CNTTATAACT CATTGCT ATTCCATTT CCTCTGTTCC TTTTATTTTC 120  
ACTTCCCTTG TAATGTTAGT CTCTTGTAC TGATTTCTGA AGAGTTCATT TATGATTAAA 180  
CATGTTAAC ATTGTCTAG AATGCAAAT ATGTTTTCC TCATTCTT TACTATGGTG 240  
TTTTATTTT GGGTTATACA GAAGTNGTAT ATTGAAATAT AATCTNGNC TGTTTATGA 300  
CTTTGGAGTT TTGTGGTTT TTNAAACCAN GTTACAGTG GNATCCNTNN ATTNGGTATT 360  
GCCGTCNTAN TNCCNGCAGT TAGGTN 386

SEQ ID NO:2284

LENGTH:384

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02640

SEQUENCE DESCRIPTION:

GATCTNNTCA AACAGCAAAC GCCCACAGAN GGCCCAGAGG NGGTGGTAAT CAGGGTGTGT 60  
GGGTGNTTTT AGGGTTCTT AGTGTGTTT CTTTCACCCA GGCGGTGGTG GTCCCAGCCA 120  
GTTTGGTGCT GACGGTGAGA GGAAATNAGA ATCTGTTGC AAATTGCTCA ACCCACCCCC 180  
TCAACATGAG GGGCTTCCAT TTTNTGTGTT TTGTAAGGGAA ACTGTTCTT TCATGCCGCC 240  
ATGTTCTGA TATTAGTTCT GATTCTTTT TAACAAATGT TATCATGATT ANGAAAATTT 300  
CCAGCACTT AATGGCCAAT TAACTGAGAA TGTAAGAAA TTGATGCTGT ACAAGGCAAA 360  
TAAAGCTGTT TATTAACCTT GAAA 384

SEQ ID NO:2285

LENGTH:383

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02641

SEQUENCE DESCRIPTION:

GATCTTTCT ATAATATCCT ACTACTTGG TTTCTAGC TCCATACAC ACACCTAAC 60  
CTGTATTATG AATTACATAT TACAAAGTCA TAAATNTGCC ATATGGATAT ACAGTACATT 120  
CTAGTTGGAA TCGTTACTC TGCTAGAATT TAGGTGTGAG ATTTTTGTT TCCCAGGTAT 180

00865

2153480

AGCAGGGCTTA TGTTGGTGG CATTAAATTG GTTCTTTAA AATGCTTGG TGGCACTTT 240  
GTAAACAGAT TGCTCTAGA TTGTTACAAA CCAAGCCTAA GACACATCG TGAATACTTA 300  
GGATTTGTAG CTTAACACA TTCTAGACTT GTGAGTTGAA TGACAAAGCA GTTGGACCAA 360  
AAANTTTATG GGCATTAAA GGN 383

SEQ ID NO:2286

LENGTH:424

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02642

SEQUENCE DESCRIPTION:

GATCTAAAAT ACCTGGTGGC TTTTNACAAA AAGCAGATTN TNTTCATGTA CTGTNATGTC 60  
TGATGCAATG CATCCTAGAA CAAACTGGCC ATTTGCNAGT TTACTCTAA GACTAACAT 120  
AGCTTGGTG TGTGTGGTCT TACTCATCTN CTAGTACCTT TAAGGACAAA TCCTAAGGAC 180  
TTGGACACTT GCAATAAAGA AATTTTATTT TANACCCAAG TCTCCCTGGA TTGATAATAT 240  
ATACACATTG GTCAGCATT CCAGTCGTGG TGAGAGGCAG CTGTTGAGC TCCAATGTGT 300  
GCAGCTTGA ACTAGGGCTG GGGTTGTGGG TGCCTCTTCT GAAAGGTCTA ACCATTATTG 360  
GATAACTGGC TTTTTCTTC CTCTTGGAA TGTACCATTA NAAATAATTT TTTGAACCAT 420  
CAAA 424

SEQ ID NO:2287

LENGTH:378

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02643

SEQUENCE DESCRIPTION:

GATCCGAAGA GGAAGGGCGG TCCGGGCTCC ACACTTAGCT TCGTGGCAA ACGCAGAGGC 60  
GGGAACAAAC TAGCCCTNAA GACGGGAATA GTAGCCAAGA AGCAGAAGNC GGAGGATGAG 120  
GTATTAACAA GTAAAGGTGA CGCGTGGGCC AAGTNCNNNG CAGAAGTGA AAAGTACAAA 180  
GCTCACCAAGT GCGGTGACGA TGATAAAACT CGGCCCTGG TGAAATNAAG CCCCTCCCC 240  
ACCTGCCAT GGCTGGGAC TCTCTGCGAT GTACATAACT ATTTAATGCA GCGGCANGTC 300  
GACAGCTTTC CCTGAGAGGA CTAAAAGCA GAAGGAAACC GAGATGCTTC CCGNAAGCCG 360  
TGGACGATTC TCCAAGNN 378

SEQ ID NO:2288

LENGTH:370

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02644

SEQUENCE DESCRIPTION:

GATCTTCTTG ACTATGCCAG TTGTAGTACC AGCTTCTGTA TCTGCACTGA ATTCTGNCTC 60  
AGTAATATGC CTTGTTAA AATTAAATA TTTTTCTATT TTTTTAACCT AGAAAATAAT 120  
TATAATGAAN NNNNTAAGTA TCTCATTAA GGATTCTGAT TTACATAGGT ATCACTGTAA 180  
CTTGTGCTGT TTGCATAGGT ATACTCTATC TTGTGCTATC TGCAATAAT ATCCAAGTAA 240  
ACACATTGTG ATTTACATC CGTGCATAGA AAAAAAAATC ATCTGAACTC AAATCAATCT 300

00866

2153480

GTTGATACTG ACTAGATTGG TGACGTGTTT ATGTGTACCA CTAGTGATAA TGCACGGTCC 360  
TGTACAAGCN 370

SEQ ID NO:2289

LENGTH:370

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02645

SEQUENCE DESCRIPTION:

GATCACAGGA ACAGCAGGTG ACAGGCCAG CTATAGTTAG GAATACACAA GCCGTAAT 60  
CGAGTCCTTA CAGCCATACC ACAAGGTACG TCCANNTGGA CTACAAGAAG AGCTTCCTTT 120  
AAAGTTCTTA TTTCAGCATA AAGAGGCTGT CCTTTTTTTT NAGGAATAGT TTGGACCTTG 180  
TGCCTCTGT GGGAGGCTGA GGACTGCAAG AGGAGAGCTA GCAGATATGC CTGTTCACCC 240  
CTCTCTGGTA CTTGTGGCTT GCTAGTATGT TTTNATGATA ATCTCAGGCA TTGTTGCAT 300  
TTGTGTTTAT TAATAGGGTT TTTGTTTTT GTTGTTCCT NTTTNACAG TAANGGCTGA 360  
ATTACATAAA 370

SEQ ID NO:2290

LENGTH:367

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02646

SEQUENCE DESCRIPTION:

GATCTGAAAG GAATGCTAGA AGTGTAGA GAGCTGACAG ATGTCCGACG CTACTGGGGG 60  
CATGCNACAG GGGGAATGGC TCGCTTCAGT GCCCTGCTGC TCAAAGCTCT AGGGNAGAAT 120  
GCAGTCGGGT AGNCTGTGGG GCTCTAACCC CACAGCAACC TCTAGGGATG ACGTCACTAA 180  
AAACCGATGA AGCCTCCATA ACATTGGTTC CTTACTGACG CTGAGGAGCA NGGCAATCTT 240  
CACACCTTAA CCAATGCTAT TCATGTAGGA TGACCAAGAA ATGAATGTTT CTTACTGAAA 300  
TAATACATAT TTTGGCATE TTTGGTTAC CCATAGACTA ATTAAANCTA ATCCNNNGNT 360  
TTATAAA 367

SEQ ID NO:2291

LENGTH:359

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02648

SEQUENCE DESCRIPTION:

GATCCTGACA GAGCCCTGAA CAGATTATAT CACTCGGCTA GAGGCAGTC AAAGACGACT 60  
TGGAACTATA CAGTCAGGTT CAACTACTCA ATTTCATGCT GGCATGAGAA GATAATCCTT 120  
TGAAACATCA TTAATTGAAG TGATTTAAA TAGATTTCTT TTGTAATC AATGGTTCTT 180  
TTGTGCTTTN GN>NNNNNCGA ATATTCAATG GGACCAATAT GAACACAGCT TATGATTGTA 240  
TACAAATCCC TTGCCAGCAC ATGAAANCAA ACTGGANTTT GTATATATAA GCATTGTGTA 300  
TGTATTGATG CACAATAATT ATNGANTTAC CTGTATATTT GTGGGAATGC TAATTAAN 359

SEQ ID NO:2292

00867

2153480

LENGTH:357

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02650

SEQUENCE DESCRIPTION:

GATCTGTGGG TCCGGCTGNA GGAGAGTGAC ATAGTCCCGC AACTCCANNT TGCTGTCCCT 60  
GGACAGGCAC ATCTCCACTG AACTGCGGCT CCNTGCCGT GGGCATTCCC ACCACAGCCA 120  
GATGGTGGCC AGCAGTGCCT GCCTGTNTCT CTGGACTCCT GTGTTCTGGG TGCTGGTGC 180  
GGCTTTCCAA ACAGAGACAC CGCTCTGTA ACGACTGGAA GCACCAGGCT AAGNACCTNA 240  
CCCCCTGNAC TTNGAAGGAA TGGGCATTNC NGTACTTCAA CATTCTGGGT CTAGGCCTTG 300  
TTGGGGCCAA TTCAAGAAGN GGCTTGTIN TTNGAAAAAA GTGGGCCNNNG TTTTNAN 357

SEQ ID NO:2293

LENGTH:355

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02651

SEQUENCE DESCRIPTION:

GATCCTCTT TTTGGTTTG GAAATATAAT CATTGTTAAT GTTTCCCTC CAAATAGAAT 60  
ACTGTTTAT CCATACAAAT CATAACAGCA TCTATCCAT GCTAGGGTTG GAAACTGATA 120  
TTGGTATTAC TTGTGTTTT CCTTAGTGTG TTTTATTCC CAGTTTCATC TNCTTTAAA 180  
AATGAAAATA TGGTGCCTTC CCTCCCTCCA GGAAGACTGG CAAATATTNC CTTTTATTCA 240  
CTGCTGCTGT GGAGTGATGA GATATGCACT TTACTCTTTA AGATTCAGCA AAAAGCTTT 300  
CACTTCTCAG TATATCCAGA ATACATCATA TCTGGGACTT AGGAAAATTG GCCAN 355

SEQ ID NO:2294

LENGTH:330

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02652

SEQUENCE DESCRIPTION:

GATCTTTAC ACCACATCAC AGTGANCACA CTGGGGAGAC GTGTTTTTG GGNAAACTCA 60  
AAGGTGCTAG CTCCCTGATT CAAAGAAATA TTTCTCATGT TTGTTCATTC TAGTTATAT 120  
TTNCATTTAA AATCCTTAA GTTAAGTTA AGCTTTAA AAGTTAGTT TGAGAATTGA 180  
GACACAATAC TAATACTGTA GGAATTGGTG AGGCTTGACT TAAAACCTTC TTTGTACTGT 240  
GATTCCTTT TGGGTGTATT TTGCTAAGTG AACCTTGTAA AATNTTNGT TAACTAAATN 300  
TTTCCTTAA AATAAAGACT TTTTCACAAA 330

SEQ ID NO:2295

LENGTH:352

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02653

SEQUENCE DESCRIPTION:

GATCCTATGG ATTTCCCGG CTGGTTGCCA CTACTNTACA ACATTCANAG CCCACATCCA 60

00868

TCTGTGCCAT TAAGCTTTT TGAGACATGA GAGATGCCTC TTCCCTGCTG TATGACATGC 120  
 ATTTGGGAAG TTGGAAAGAA ATGACAAAAT CAGGGAGAAA ACATCCAAGC TTCTTACCTG 180  
 TAGATAGAAT CAGCCCTCAC TTGGTGCTTA TTACCAAGTTA TTCANGGACA ATAACAACAA 240  
 CAAAATTAGT AGACATNCAT GANGCACATN TTTAGGNCCA AAGGNTAGCA TCAACTTGTA 300  
 TTTNGAAGGG ACTGTAGTT TCAGCATTTC ATGGCNATT TTTATNAAAG TN 352

SEQ ID NO:2296

LENGTH:351

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02654

SEQUENCE DESCRIPTION:

GATCGCAGCC GCTTCGCACG CCGCATCACC CAGGCCAGG AGGAGCTGAG CCCCTGCCTC 60  
 ACCCCTGCTG CCCGGGCCAG AGCCTGGCA CGCCTCAGGA ACCCACCTT AGCCCCCATC 120  
 CCTGCCCTCA CCCAGACCTT GNCTTCCTCC TCTGTCCCTT CGTCCCCAGT NCAGACCACG 180  
 CCCTTGAGCC AAGCTGTGGC CACACCTTCC CGCTCGTNTG CTGCTGCAGC GGCTGCCCTG 240  
 GACCTCAGTG GGAGGGTGG CTGAGACCAA CTGGTTTGCC TATAATTAT TAACTATTAA 300  
 TTTTTCTAA GTGTGGTTT ATATAAGGA TAAAGGCTTT TGATTTGTAA A 351

SEQ ID NO:2297

LENGTH:357

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02656

SEQUENCE DESCRIPTION:

GATCCCCGTT CCTGACATCA CAGCAGCCTC CAACACAAGG CTCCAAGACC TAGGCTCATG 60  
 GACGAGATGG GAAGGCACAG GGAGAAGGGA TAACCCCTACA CCCAGACCCC AGGCTGGACA 120  
 TGCTGACTGT CCTNTCGNGT NCAGCCNGT GCCTTGGCTT TTCTAGCCTA TTTACCTGCA 180  
 GGCTGAGCCA CTNTCTCCC TTCCCCCAGC ATCACTCCCC AAGGAAGAGC CAATGTTTN 240  
 CACCNATAAT NCTNTCTGCC GANCCCTAGT CCCCTCTGCT CAGCCAAGGT TTGTTATCAG 300  
 GTTTCAAGGG GCCATGGTTT CACATTAAGG ATTTAAAAGG GTAGTAATTG GGGGAAA 357

SEQ ID NO:2298

LENGTH:344

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02657

SEQUENCE DESCRIPTION:

GATCAAATTN NAGTGGCTTT GGACAGAAAA GAAGGCTCTG GATTTAAGCG GGTGGTCACC 60  
 TGTGAGACCA GGTCTACCTT GGGACTGTAA TTAACTGAA TCAGTTATT CCTTGAAATT 120  
 TCACAGTAGT GGGTGGGCCT GTTTAAGGC TCTGACAGAT ACCACGAAAC ATGANGCNCG 180  
 NNGAACATACA AGACCCCCGG GGTCTTCCTG AGTGCAAGGC TGAAATGGAC AAGGGCTCCT 240  
 CACGGGGGTG GAGGGAGCCG GAGCCTGCCT TGTGTTCCCTT TTTTGAATTG TGACATTTT 300  
 CAAACACATA ATTAAAAGGA CTTATGCTCT GCTGTCTCAG GAAA 344

2153480

SEQ ID NO:2299

LENGTH:462

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02658

SEQUENCE DESCRIPTION:

GATCTGGTCC CTGAGAAAACA TATTGTGATG AAGTGGAGGT TTAAATCTTG GCCAGAGGGA 60  
CACTTTGCCA CCATCACCTT GACCTTCATC GACAAGAACG GAGAGACTNA GCTGTGCATG 120  
GANGGTGAG GCATCCCTGC TCCTGAGGAA GAGCGGACAC GACAGGGCTG GCAGCGGTAC 180  
TACTTTGAGG GCATTAACAA GACCTTTGGC TATGGCGCAC GCTTATTAA GGGCCAGCGG 240  
CAGGGGACTC CAGCCTGCTG GACACTTCAN GTCCAGCTCT CTCCCTGACTG GGGCTTNCGA 300  
CTCACAGGAT TGCATCGNCC CAGCTGCTAA CTTNGGGCCG GGGGCCNTC CCTTNACAA 360  
TATAACCTTGG GTTTNTGCAT GTTTCTNN CTGGGTTGGG GTTCAGAGGG GCAATTTCNN 420  
CTTTTAATGG TGTACATATN NCTANATANN CATAATTAA AA 462

SEQ ID NO:2300

LENGTH:341

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02659

SEQUENCE DESCRIPTION:

GATCAACTTC CCACAAACTG AGGAATGAAT TCCACGAGCC TGTTCTGAAA ATNTGGACGT 60  
AAGACAAACA CGTGCTCGTC CTTTAATGGA GTTCACCAGC ACACCTGTTA ACCAGTCCTG 120  
TTTGCTTTCG TCTTTTTTG TGCGTAATAA AGTCAACTGA CCAAGTGACC ATGAAAAGGG 180  
GCTGTCTGGG GCTCCTGTT TTNAGCTGCT GTTCTTCAGC TCCGACCATG TTGCTGTGTG 240  
ATTATCTCAA TTGGNTTAA TTGAGGCAGA AACTGAAGCT CTACCAATGA ACTGTTAGAA 300  
ACAAGACACA CTNTNGTATT AAAATTGCTT GCAGTAACAA A 341

SEQ ID NO:2301

LENGTH:339

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02660

SEQUENCE DESCRIPTION:

GATCNGTGGC AAAACCAAGT GTGGTCTTTC AGCTTCAGTG TGTTAGCATC CCAGCACCTG 60  
GGATGGGGTT TGTGGGCAAG TTGATTTCG CACACTGTAG GGCCCAGGTN NNCCCATG 120  
CACCGTGAAG CCAAATNCTA GCCCAAGTCT GGTAGAGCAG TCGGGCAGCT AGTTTCCGG 180  
GGAGGGATGAT GTGGTGGGAC AGAGGACCTC AGTGGCCTAT TACGGAGCCC TCTTCCCAGA 240  
CTAAATTCTAT AGCCGAGAGC TCGGGGGAT GGTAGAGTTA AAATTAAAA TAATTCTA 300  
AATTCTGTAT TTGGATATTA GTGTTAAGT GTTAATTN 339

SEQ ID NO:2302

LENGTH:441

TYPE:nucleic acid

TOPOLOGY:linear

00870

2153480

CLONE:HUMGS02661

SEQUENCE DESCRIPTION:

GATCCAGGGG CTGCCCTGG CCTCTTAGGG AGCAGAGAGC AGAACTCCGC AGCCCAGCCC 60  
AGAGGAGTGT CACCTCCAC CTTGGAGAG GAATCCTTCC CTCCCCTGGA CAAAGTTGCT 120  
GACAAGCCCC TGAAGTGGCC TCTCCATATT CCAGCTGAGC CTGAATCTGA CTCTTGAGGG 180  
TTGGGGCTGC ACTTATTTAT TGCAGGGAGA CAGCTCTCTC TCCCACCTNC TCCCCAGATG 240  
GGAGGAGAGC CTGAGGCCA AGCAGGACCC GGGGGTTCCA GCCCTAGCT GCTCTGGAGT 300  
GGGGGAGGTT GGTGGACCAT GGGAGTNCCCT GGTGCTGCC CTNAAGGTGG GACCCAGGCG 360  
TTNTCAAGCT GTACCCTTT NCCGATGGAA TTTGTGTTT TGAANATNNNG TGTCTNNTAC 420  
TANTTNTTT AAATAAAAAA N 441

SEQ ID NO:2303

LENGTH:336

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02662

SEQUENCE DESCRIPTION:

GATCATGGCA TCCAAGACCA GAGTCTCAGA ACTCATTAAG AAACAGTTA CTTGGAATGG 60  
AGAATAACCA TCTGTAATAC AGGTCTGTG ATTCATTCA TCTCAAATTA TTTGAATTG 120  
TTCCCAAATG GCTGCTGGAT TTAGGTGGTA ATAGGGGCTG TGGGCCATAA ATCTGAAGCC 180  
TTGAGGAACC TTGGGTCTGG AGAGCCATGA AGAGGGAAAGG AAAAGAGGGC AAGTCCTGAA 240  
CCTAACCAAT GACCTGATGG ATTGCTCGAC CAAGNCACAG AAGTGAAGTC TGTGCTGTG 300  
CACTTTCCAC AGACTGGNGT TTTGGTNCT GAATAN 336

SEQ ID NO:2304

LENGTH:363

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02663

SEQUENCE DESCRIPTION:

GATCAAGTNA CCTCTGCCCA CCTGGACACA ACACCAAAAA GGCTTCTAAA NACGGGTGTN 60  
AGTCTTTNA GCAACCCGT CCAGTACTGG GAGATACAGC CATCCACCTT CANATGTGTC 120  
TACGTGCGCT CTGCCATTCA ACTCGGAAAC TATAAGTAAT TCTNAAGAAA GCCCTCATTT 180  
TTATAACCTG GCAAAACCTT GTTAATGTCA TTGCTAAAAA ATAAATAAAA GCTAGATACT 240  
GGNAACCTAA CTGCAATGTG GATGTTTTAC CCACATGGCT TTATTATGCA TAANGCCAAT 300  
ATTTCTGTT TTAAGTAATN GCCTTCAATT NNNAAGNTAA TTTGGCCTG NCCCANAAT 360  
AAA 363

SEQ ID NO:2305

LENGTH:232

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02664

SEQUENCE DESCRIPTION:

GATCAGAGTT CCTCCTACTT ACAACCCAGG GTGTGAACAT GTNCTCCATT TTCAAGCTGG 60

00871

AAGAAGTGAG CAGTGGTGGGA GTGAGGGCTG TAAGGCAGGC CCATTCAGAG CTATGGTGCT 120  
 TGCTGGTGNC TGCCACCTTC AAGTTCTGGA CCTGGGCATG ACATCCTTN TTTTAATGAT 180  
 GCCATGGCAA CTTAGAGATT GCATTTTAT TAAAGCATT CCTACCAGCA AA 232

SEQ ID NO:2306

LENGTH:330

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02665

SEQUENCE DESCRIPTION:

GATCTTAAGT ATAATTACAA GGAAGAAGTG AAGAAGATA TTCTCTTAGA AGAGAAGGTA 60  
 AAAAAAACTTT CAGAACAAATT GGGAGTTGAA TTAACTAGCC CTGTTGCTGC TTCTGAAGAG 120  
 TTTGAAGATG AAGAAGAAAG NNCTGTTAAT TTCCCCATT ACTAAAGGTC ACCTATAAAC 180  
 TTTGTTTCAT TTAACTATT ATTAACTTTA TAAGTTAAAT ATACTTGAA ATAAGCAGTT 240  
 CTCCGAACTG TAGTATTTC TTCTCACTAC CTTGGTACCT TTATACTTAG ATTGGAATT 300  
 TTAATAAATAA GAATTATATG AAATTTTCAN 330

SEQ ID NO:2307

LENGTH:328

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02666

SEQUENCE DESCRIPTION:

GATCGACTTA CTCAACATGA GACAATTCAAT ACTGGGTGTGA ACCACANAAA TGCAAAGAAT 60  
 GTGGTAAGGC CTTTAGTCAT TGCTATCAAC TTAGTCAACA TCAAAGATTT CACCATGGTG 120  
 AGAGACTCTT AATGTAATGA GAGGGAAAGC CTTTAGCCAT GGAACATTT TACTGTTGTC 180  
 ACTATTATNA TGCTATAGTG AAGATTAAC TAGTTAATAT AGAATATAAA TACTTGGAAA 240  
 GGCATCTGGC ACATCGTATT TGCTTACTAA ATACATTATT TTTATGATAA TTGTTAGAAT 300  
 TACTAAAAAT AAATCTTATA GAAGGAAA 328

SEQ ID NO:2308

LENGTH:327

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02667

SEQUENCE DESCRIPTION:

GATCTCAGGT ATCAGACCCAC TGAGCAACCC ACCGCCAGNC TGCAAGGCTT CAGAGGCCA 60  
 CCTGGGCCCA CGCTGGCCTG CCCCAGGGTG GGCTCCAGC GCAACTGCAG GCATCCTCTA 120  
 GTGGGGCCTC TGGTAACCCT AGCAGATGGT GGTGACCCCC CTGAGATGAG GAAGCTGGTG 180  
 ACCTNNNGACT GAGCAGCAGC CTATGGGCTC CGGGTCAAGT GCTATTCCA GCGGATGCC 240  
 TTCCCTTGC GNCACTCCCT CCTTNCTGA GTGTCCAGGC GCNANTGNAA AACAGNAACC 300  
 CTAGGGTCTG GAAACTACTT TTTTTN 327

SEQ ID NO:2309

LENGTH:326

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02668

SEQUENCE DESCRIPTION:

GATCCAGTTG TTATAGTGA CTCATGGTAA TGGTTTGTA GAACAATAGA GATTTNATT 60  
 TCTATGTAGA TGAGTTGGTA TGAGAATATA TGGAAATTTT AAGGGACTGT TAAATCTT 120  
 GATTGTAGA CTATTAATA TACCGTATGC ATAAAGTAAG CCTTAGCTC TAAGGTAAAG 180  
 ACGACACCTT TTCGGTTGT GACTACAAAT AGGTAAAAAA TAGATTTAA TTTTATTAAA 240  
 AATATAATT AATGCAGGTT GTTGAAGCA TCTGTCTTCA TATGATGGCA TTAGAACACC 300  
 TTGGTATAAT AAAAGTTAC CGTAAA 326

SEQ ID NO:2310

LENGTH:322

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02669

SEQUENCE DESCRIPTION:

GATCAAGAAG GAGCTAGAGA CCATTTCAAA GAAAAAAAAT GCTTTATAGA GTTTAAGTA 60  
 TGACTTAGAT GGGTCCAGGC AAATAAACTA AAAAGAAGTG AAGGCAACAT GTATCGTCTG 120  
 GCAGAACTAA ATCTGGAGT GGGGTGAGGG ATGAAAGACT ACATATTGGG TACAGTGTAC 180  
 ACTGCTCGGG TGATGGGTGC GCTAAAGTCG CAGAAATCAC TAAAGAACTC ATCCATGTAA 240  
 CCAAACACCA CCTGTACCCC AAAAACGAAA TAAAAAAACA AAACCTTGGG GCCCATTCCC 300  
 CCTAGGAATG GACTACTGTAA AA 322

SEQ ID NO:2311

LENGTH:321

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02670

SEQUENCE DESCRIPTION:

GATCTAAATT ACCTGGTT TCGCATATGT CTATGAAATN CTGTGATAAN GTTTTCAAT 60  
 ACATTGNTTC ACTGGCGTCT GTTTCANTT TATACTTTA ATAACCTCATC ACTGGTGGTA 120  
 CTTTATCTG AAAAGTAATA TTTTNATAT TTTANCATTG GACAGTGTAA GCCAGTTGTA 180  
 ATGATGTATC AGANGTAAAG AAAAACCCAT TAAAGTTATA GCTAATAGAT GCTGTTGGG 240  
 GTTAAATTAA TAGTAAANTA ATCCAATATA GCACTNTNNA TGATTNTTA TATAAANGTC 300  
 AACTGGTACA TTTCATTCAAG N 321

SEQ ID NO:2312

LENGTH:319

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02672

SEQUENCE DESCRIPTION:

GATCGAAGGG TTTTTAGAGA ATGTNTTCA AAACCATGCC TGGTATTTTC ACCATAAAA 60  
 GAAGTTTCAG TTGTCCTTAA ATTTGTATAA CGGTTAATT CTGTCTTGT CATTGAGT 120

2153480

ATTTTAAAAA AATATGTCGT AGAATTCCCT CGAAAGGCCT TCAGACACAT GCTATGTTCT 180  
GTCTTCCCAA ACCCAGTCTC CTCTCCATT TAGCCCAGTG TTTCTTGA GGACCCCTTA 240  
ATCTTGCTTT CTTAGAATT TTTACCCAAT TGGATTGGAA TGCAAGGGTC TCCAAACTGA 300  
TTAAATATT GAAGGGAAA 319

SEQ ID NO:2313

LENGTH:327

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02673

SEQUENCE DESCRIPTION:

GATCGACAAA ACTTGAAACG AGGCTGACTG TGCCACCGTC CCGCCAGCCA TTCGCTCCTA 60  
CTGATGAGAC AAGATGTTGATGACAGAN TCAGCTTTG TAATTATGTA TAATAGCTCA 120  
TGCATGTTTC CATGTCATAA CTGTNTTCAT ACGCTTCTGC ACTCTGGGAA AGAAGGGAGTA 180  
CATTGAAGGG AGATTGGCAC CTAGTGGCTG GGAGCTTGCC AGGAACCCAG TGGCCAGGGA 240  
GCGTGGCACT TACCNGNGGT CCCTTGCTTC ATTCTTGTA GATGATAAAA CTGGGCACAG 300  
CTCTTAAATA AAATATAAAAT GANCAA 327

SEQ ID NO:2314

LENGTH:313

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02675

SEQUENCE DESCRIPTION:

GATCAACCAC ATGCACATCC TTACTACAGA ATCCGTCCTT TCATTTAAC ATTATAGCAA 60  
GCTATGATTT TNATATATAA ATATTATATA AATNANGTAT AANACATTA AAGTTAACTA 120  
TGTAAGATAT TATNTCTGAA ACAATTAGC TATATCCACT ATGATTATAA ACTGTGTCTC 180  
GACCTGTGTT ATNTACANAA GTGTGTTAAA AAAGCATTGA GTTAATTNN TTAAATATCA 240  
ACTAAAATAT CATAGTTCTG TGGNNNGACAT TGTGTTATAA TGANATAACT GCAACTAGAG 300  
AAANCTGTAT AAN 313

SEQ ID NO:2315

LENGTH:365

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02676

SEQUENCE DESCRIPTION:

GATCGAGGAC ATAAGGAACG AGTCACAGTG TTGCTGCAAC ATAGAGCTGA CTTAACTGT 60  
NAGGACAATG AAGGCCAAAC AGCTCTACAT TATGCTCTG CCTGTAAGTT TCTGGATATT 120  
GTAGAGCTGC TGCTCCAGTC TGGTGTGAC CCCACTCTCC GAGACCAGGA TGGCTGCCTG 180  
CCAGAGGAGG TGACAGGCTG CAAAACAGTT TCTTGGTGC TGCAGCGGCA CACAACCTGGC 240  
AAGGCTTAAT CAAAAGACTG GAAAACGTCA GTCTGTAATA GCATAAGGCT TCCATTATGA 300  
AAGAAAACGAAATAAT ACTCTTTTC CACCCGTCTT TGGTATGTAT TGGCTTATAA 360  
AATTN 365

00874

SEQ ID NO:2316

LENGTH:308

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02677

## SEQUENCE DESCRIPTION:

GATCCTGGAG CTGGCTGGCA ACGCGTGC GT NACAACAAGA AGACCAGGAT AATTCCCCGC 60  
 CACCTGCAGC TCGCCATCCG CAACGACGAG GAGTTAACAA AGCTGCTGG CAAAGTGACC 120  
 ATCGCTTAGG CGGGCGTCCT CCCAACATC CAGGCCGTGC TGCTGCCAA GAAGACGGAG 180  
 AGTCAGAAGA CGAAGAGCAA ATNACCCCTGA CGCCGNCCCTC AGGGAGCTGN CTNCNCANA 240  
 TAAGGCCCTT TTNATGGTCG TCCCGCAATG CTTTGAAATG TGCTGGNTGT CATGGAGGGC 300  
 CGGTGACN

308

SEQ ID NO:2317

LENGTH:306

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02678

## SEQUENCE DESCRIPTION:

GATCTAGATA ACTCATGACA TTTTATTGTA CCAACATAGC ACATGATGAG ATATCAAGGT 60  
 AATTAAAATA GCATGCTTGA AAAAAAAATA CGTAATCTGT TTCACCTGTA ACTGTTTAAG 120  
 CCAATAAACT TTTCAAAATT TATGTAATGT GGGGCTTTA TGTAGCACCT TACGTTTCA 180  
 TGCTGCTTAT TGTTTATTTC TACTGAAAAA AATGANNTTC AAGATTCTCA ACTTTNTTAA 240  
 TTTCAAAAT NGTTTATGGT TTTGACTATA GGAATACAAA ANTTCCATT TNNGGNGAAT 300  
 AAGAAA

306

SEQ ID NO:2318

LENGTH:305

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02679

## SEQUENCE DESCRIPTION:

GATCCCCTGG CTCCCCAGCA CACATTCCCT TGAAATAAGG TTTCAATATA CATCTACATA 60  
 CTATATATAT ATTGGCAAC TTGTATTGT GTGTATGTAT ATATATATAT GTTTATGTAT 120  
 ATATGTGATT CTGATAAAAT AGACATTGCT ATTCTGTTT TTATATGTAA AAACAAAACA 180  
 AGAAAAAAATA GAGAATTCTA CATACTAAAT CTCTCTCCTT TTTTAATTAA AATATTGTN 240  
 ATCATTTATT TATTGGTGCT ACTGTTTATC CGTAATAATT GTGGGGAAAA GATATTAACA 300  
 TCAAA

305

SEQ ID NO:2319

LENGTH:303

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02680

## SEQUENCE DESCRIPTION:

2153480

GATCGAAATC ACTATAATT TAAACCTNGT GATTGGAATG AATATGGTTT GTGCTGGAAG 60  
CTCCGAGGTG GAAGAGACTC GTGCAATGGA GATTCTGGAA GCCCTTGTT GTGCGAGGGT 120  
GTTTCCGAG GGGTCACTTC CTTGGCCTT GAAAATAAT GCGGAGACCC TCGTGGGCCT 180  
GGTGTCTATA TTCTTCTCTC AAAGAACAC CTCAACTGGA TAATTATGAC TATCAAGGGA 240  
GCAGTTAAA TAACCGTTTC CTNTCATTAA CTGTGGCTTC TTAATCTTT CACAAATAAA 300  
ATN 303

SEQ ID NO:2320

LENGTH:302

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02681

SEQUENCE DESCRIPTION:

GATCCCTGCT GAATCCACAG GCCAAAATAG TCAATGTAAC TGCAAATCTA ATTCATCCT 60  
CCTTTCTGA GGCCAECTCA GGAAATNAAA GGACGATTCT AATTTCACCT GCGGTTACTT 120  
TTGTGGATGT GTCTGCACCT GCAGAGGCAG GCTTCANAGC TCCACCAGCC ATCAATGCCA 180  
GGCTGCCCTT TAACTTCTTC TTCCCGTTG TTTGACAATG CTCAGATGCA TCAGTTCCCT 240  
AATATACACG TGAAATTGAA AACTGTACA TTCGGTGAGA TTAAATTGAA TATACAACTA 300  
AA 302

SEQ ID NO:2321

LENGTH:301

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02682

SEQUENCE DESCRIPTION:

GATCCAATTA AAAAATTA AAACCAATTAA AAAAATTT AAAAAGAGAG AGANCACAGG AGATTCCAGT 60  
CTACTTGAGT TAGCATAATA CAGAAGTCCC CTCTACTTNA ACTTTTACAA AAAAGTAACC 120  
TGANCTAATC TGATGTNAAC CAATGTATTN ATTCTGTGG TTCTGTTCC TTGTNCNAAT 180  
TTGACAAAAC CCACTGTTCT TGTATTGTAT TGCCCAGGGG GAGCTATCAC TGTACTTGTA 240  
GAGTGGTGCT GCTTAATTC ATAATCACA ANTAAAAGCC AATTAGCTCT ATAACCTANAA 300  
A 301

SEQ ID NO:2322

LENGTH:345

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02684

SEQUENCE DESCRIPTION:

GATCAAGCGG AAAGAGTTA AGTGTCTAAC AAACCTAAAG CTACTGTAGT ACCTAAAAAG 60  
TCAGTGTGT ACATAGCATA AAAACTCTGC AGAGAAGTAT TCCCAATAAG GAAATAGCAT 120  
TGAAATGTTA AATACAATTN CTGAAAGTAA TGTTTTTTN CTATCATCTG GTATACCATT 180  
GCTTTATTNT NATAAATNAT TTCCCTCATTG CCATTGGAAT AGATATCTCA GATTGTGTAG 240  
ATATGCTATT TAAATAATT ANCAGGAAAT ACTGCCGTAA GAGTTAGTAT TTCTATTNN 300  
ATATAANGTT TGCACACTGA ATTGAAGAAT TGTTGGTTT TTCCN 345

00876

2153480

SEQ ID NO:2323

LENGTH:299

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02685

SEQUENCE DESCRIPTION:

GATCTTTCT AATATGGTAT TACAATGAAA AGAATAAAGA GAAGATTGTA ATTCNCAGTT 60  
TCATTTCAA AAACTTTA CCAAAACAAA TGGAGAAGAA ACATCCAAA GCACATTCA 120  
TTTCTCCAAA CTGTGTGTT TAAATTATAG TTATAATNG TAAGGTAATT TTAAATTGTC 180  
CCTCGTATTA TTNCTCCACG CCTGTTTAG TNTNNGGTCT CCTAAGCTT TCTCTCATAG 240  
CGTAGACCTA GGGAAAGGGAT GGGAAAGATTG CCCAGTCCCC GATGGCTGCGCACACAGGN 299

SEQ ID NO:2324

LENGTH:297

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02686

SEQUENCE DESCRIPTION:

GATCCCTCTG TACAGGCTGG ATGGAAGGGG CCCTCCACAC TTCCTGGAG GTCAGAGACA 60  
AACTGTTCA GAGAGTCAGA TGGACTTCCC AAGACTTGT GAGAGATGTG ACATGGTTCT 120  
TGGATTTCCT CTGTAGCAGC CTCCTGGACT TCCTGAGGAC TCGACATTGT CCACAGATGT 180  
ACTGGCCATT ACATGAAACA AGAAACCAAG CATCTTGCT GTTGTAAATT ATTATATGTG 240  
CCATTGTTAC AGGAGATTAT AGGCTAGTCT GTAATAAATT ATCTTATAGC AGCCAAA 297

SEQ ID NO:2325

LENGTH:297

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02687

SEQUENCE DESCRIPTION:

GATCAGCAGC CGAGAAAAGT ACATCAACAA TCAGCTTGAG AATTTGGTTC AAGAATATCG 60  
TGCAGCTCAA GCCCAGCTGA GTGAGGCAAA GNAGCGATAC CAGCAGGGAA ATGGAGGNGT 120  
GACGGAAAGA ACCAGACTCC TCTCTGAGGT TNNGGAAGAA TTAGAAAAGG TAAAACAAGA 180  
AATGGAAGAA AAGGGCAGCA GCATGACTGA TGGTGTCCCT TTGGTGAAGA TTAANCNNNG 240  
CTTNNCANAA CTGAAGCAAG AANCTGTAGN GATGGACATT AGANTGGCA TTGTGGN 297

SEQ ID NO:2326

LENGTH:297

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02688

SEQUENCE DESCRIPTION:

GATCCNACTT TAGAAGCCTA CTTNTAACCC AAGGAGCTCA ATTTTTTTT TAAAGCTTA 60  
CTAATCTACC ANAGCATTGT AGATATTCTT TTTAACATC TATTGTTAA AATAGATNAT 120

00877

2153480

TATAACGGGG CAGAGAACTT TNTTTCTCT GCAAGAATGT TACATATTGT ATAGATAAAAT 180  
NAGTGNCATT TCATACCATG TATATATAGA GATGTNCTAT AAGTGTGAGA AAGTATATNC 240  
TTTAATAGAT ACTGTAATTA TAAGATATTT TAAATTAAAT ATTTTTGT AAATAAA 297

SEQ ID NO:2327

LENGTH:324

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02689

SEQUENCE DESCRIPTION:

GATCCTATGT CTGTCGTGCC ACCACGAGAT GGGAGGGAGGA GAAAAAGCGG TACGATGCCT 60  
TCCTGACCTC ACCGGCCTCC CCAAGGGTGC CGGCACCTCG GGTGGACTCA CGGCTGCTGG 120  
GCCCCACGTC AAAGGTCAAG TAAGACGTAG GTCAAGTCCT ACGTGGGGC CCAGACATCC 180  
TGGGGTCTCG GTCTGTNAGA CAGGCTGCC TAGAGCCCCA CCCAGTCGG GGGGGNTGGN 240  
GAGCAGTCTCC AAGACCACCN CACCNCTTT TGTAATNTT GTTCATTNTA ANTCAAATAC 300  
AGCGTNNTT TCANTCTGG GAAA 324

SEQ ID NO:2328

LENGTH:291

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02690

SEQUENCE DESCRIPTION:

GATCTGCAGG GGTCTGGGAG TCAGGGCCCGG CCTATTGCTT GGGTCTCTCT CTATTATAT 60  
ATCTAAGTTC ACAGTGTTC TTATTCCCCC TAAGCTTCTA GAGGCTCATG GCCCTGTAGT 120  
TAGGCCTGGC TCATTCTGCA CCTTCCAGG GAGGTGGAAG GACCCCTGTGC CCTCCTTCCC 180  
AATCTTCTT TTCAGGCTCG CCAAGGCCTA GGACCTATGT TGTAATTAA CTTTTTATT 240  
CTAAAGTTGT AGTGAAGCTC TCACCCATAA TAAAGTTGT GAATGTTCAA A 291

SEQ ID NO:2329

LENGTH:290

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02691

SEQUENCE DESCRIPTION:

GATCTAGAAT CTCTTATGT TCTCCAGAGG AAGGTGGAAG AAACCATGGG CAGGAGTAGG 60  
AATTGAGTGA TAAACAATTG GGCTAATGAA GAAAACCTCT CTTATTGTC AGTTCATCCA 120  
GATTATAACT TCAATGGGAC ACTTTAGACC ATTAGACAAT TGACACTGGA TTAAACAAAT 180  
TCACATAATG CCAAATACAC AATGTATTAA TAGCAACGTA TANTTGCAA AGATGGNCTT 240  
TANAAGATGC TGTGTAGCTA ANCTGAANTA ATTCAATTAC TTATTATTN 290

SEQ ID NO:2330

LENGTH:231

TYPE:nucleic acid

TOPOLOGY:linear

00878

CLONE:HUMGS02692

## SEQUENCE DESCRIPTION:

GATCACTCCG CCTTNTCTG GGCTCCCGTA GCACACTATA ACATCTGCTG AAGTGGTGC 60  
 GTTGCACCAT ACTTTCTGTG ACATTTGTGT CTCCCTTCCC AACTAGACTG TAAGTGCCTT 120  
 GCGGTCAAGG ACTGAATCTT GCCCGTTAT GTATGCTCCA TGNNNGGNCC ATCATCCTGC 180  
 TTGGNGCAAG TAGGCAGGNG CTCATAAAAT GTTGTTGCA TGNNNGGNAA A 231

SEQ ID NO:2331

LENGTH:285

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02693

## SEQUENCE DESCRIPTION:

GATGCCCTAC AAGCCAGCCC CTGGCACCTG CTGCTACATC ATGAAGATAG CTGCAGAGAG 60  
 CATCCCCAGT CTTGAGGCTC TCAATAGAAA AGNCCACAAC TTCCAGATNG AATGCTCTCT 120  
 GCAGGCCAAG CCCGCAGTGC CTACGTCTAA GCTGGGCCAG GCAGAGGGC GAGATGCAGG 180  
 CTCAGCACCC TCCGGAGGGG ACCCGGNCTT CCTGGGCATG GCCGTGAACA CCCTGTNTGG 240  
 CGAGGTGCCG CTCTACTACA TCTAGGACGN CTCCGGGTCA TGTGN 285

SEQ ID NO:2332

LENGTH:285

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02694

## SEQUENCE DESCRIPTION:

GATCTAGAGG TTCCANTGCT ATNCTCTCTT CTTGCTCTGAG AGCCAGGACC CTGGGGAAA 60  
 TAACGGGCAA AAAAGCACTT TNAAGACAGA TATAGTGGGA ATTNATAAAC GACTTGATAG 120  
 AAACAGAAAT GAACTGTTT ATTNATNCT CTGAGGACTC TGCTCATCAC CCANTAGTAC 180  
 CATTCTTTT CTCAGAATGG ATTCTTCCC CTATCTATCT AATCATTAGA GATGTAGCTA 240  
 NGAAATTACA TGTATGCATA TGTNTAATAT GTATATGTNT ATGTN 285

SEQ ID NO:2333

LENGTH:283

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02695

## SEQUENCE DESCRIPTION:

GATCTTAAAG CTTTGAGCAC CTGCCATTTC GCCTTGCATC GTTCCCTCG TCATGCATT 60  
 CCACATATCC ACAAACACAG AACGACTTTA GACAAGCACA TGTTACACCT GTGTTGCCAC 120  
 AAGCAGTCAT TCTTGACGGC TCCAGTTTT ATTGACACT TGAGTTAGT TTTCTCTTT 180  
 ATAAACCCAG TGAACCTCTG CACTGGCATT TGGATGTGTG TTAATGCTAT TTGTTTGTC 240  
 TAAAAAGTAA AACCTTCTC AGTTGAAC TGTATTCTCT AAA 283

SEQ ID NO:2334

LENGTH:283

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02696

SEQUENCE DESCRIPTION:

GATCTATTAA AAAGGTTAAG AGGCCAGGTT ACCCACCANT CCTTGACTG TNCTGACACT 60  
TTCAGGA GGAAAACAAG TACAAAGGTT ACGGTGGAGG CATAAGTAGA AGAGATTGTN 120  
AAGAAGGGTA ATTCACTGTNT CTTGCTCTT NCTGCTTAT GCCTCANTTT GGTTAAAAAA 180  
CTTCTNTACT GGCAAATGGT GGTATTCACT GTGGGATAGT GTCATAACTA ATTTGACAAT 240  
TTATTAAATGA TAAAATAACA ATAAATGTCT AGCTTTACA AAA 283

SEQ ID NO:2335

LENGTH:283

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02697

SEQUENCE DESCRIPTION:

GATCACAAAA AAATCAGTCT TTAAGCATTT GCTTGGTAAG GTTTCTTAAN ATNAGGTTA 60  
TAATACAAACC ATCTGTAATG TATCTNTCGN TTGANCTTGT GGGCCATACA ATTCACTAAC 120  
TAGATGNATA CATTGTGGAC AGCATCCTCA CTACCCCTCT CTACTCACTC ACAAAGAAC 180  
ATGATACACT GGAATGTTT TNTNTGGAAT CCTCTTTCTA CTCTGTATT AAAATTTNC 240  
CCCACTTCAT GATTATATNC AAAATAAACAA ACTACATCAT AAA 283

SEQ ID NO:2336

LENGTH:282

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02698

SEQUENCE DESCRIPTION:

GATCAGCTTG CAGAGCTTG CTTTAGGTT AGATACAAAC AAAGTAAATC ATAGTTGGTG 60  
TAAATCCAGC AAAAACAGC TGGCTTGGA ATGGAGAACAA CTACAATTCA AATTTGAAGT 120  
ATATTCAAGAA GAAAACTTG GAATTAGCTT TACATTTGTT TGTAATCTA AACAAATNTG 180  
CAAAATTGGT CAAAATGTAA GTNTATNGCA TTTTTAAAGA TTANTGGTC CTTTATGTG 240  
CTGATTCTT TGTATTCTGT TCTCTGCATT CATCATTCA GN 282

SEQ ID NO:2337

LENGTH:284

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02699

SEQUENCE DESCRIPTION:

GATCTGTACC ACACCTTCCG GCCAGCTGTC CTCTGCTGA TGTTCCCTCAG TGTCTACAAG 60  
GCCTTTGTTA TGGAGACCTT CGTCCACCTC TGCTCGCTGG GCAGTTGGGC AGCTCTACTG 120  
GCCCGAGCAG TGGTAACGGG GCTGCTGGCC CTCAGCACTT TGCCCTGTA TGTGCCCGTT 180  
GTCAATGTGC ACTCCTAGGC TTGGTGTCTC AGACATTGA TGTAACCTTT CCCTGNCTCG 240  
NTCCAGGTTT TTAGTGAAGT AAACAGGTAT TTTGGAAAGT TAAA 284

00880

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SEQ ID NO:2338

LENGTH:280

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02700

SEQUENCE DESCRIPTION:

GATCAACGAC AGCCTCCAGT TTCCACTTNG TGAGAGAAC AAGGAACCGG GGCATGCTCA 60  
NCTATGGCTG CAAGCCNTTC AAGTGAAGCT GGGCACTTAC CCCCTTNATT CCATTCTCCT 120  
CAGGATAACA GATTAAAATT CCAGAAGTGT GCACCTGTNG TNTATTCAAGG AGATTNTCGT 180  
TNTGCATAAA GAGACCACCTT GAGGCCCTGT AAGCAAAGAC TAATTNGTC TNAGTCAAAA 240  
TCTTGGGAAT CTGATNAACT AACACACTCA AATGAAACTN 280

SEQ ID NO:2339

LENGTH:285

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02701

SEQUENCE DESCRIPTION:

GATCTGGAGC AGGAAGGCCT CGAGGCACAC AGGGGCTGCT GGCGGGCGAG TGGGCCCCAC 60  
CCCTCTGGGA GCTGGGCAGC CTCTTCCAGG CTTCTGTGAA GAGGGAGAGC CAGGCTTATG 120  
CGTAANTTCA TAGCTTCTNC TGGCCTGGGG TGGACCCAGG ACCCCTGGGG CCTGGGTGCC 180  
CTGAGTGGTG GTAAAGTGGA GCAATCCCTT NACGCTCCTT GNCCATGTT TCAGCGGNCA 240  
GNTTGGNTTT NNCCTTNAAT AAATNTGCTT TATTTNCTCT TCAAA 285

SEQ ID NO:2340

LENGTH:320

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02702

SEQUENCE DESCRIPTION:

GATCGTAAAC TTGTTGATAA AGAAGATATC GACACTAGCA GCAAAGNAGG CTGTGTCCAA 60  
CAGGCTACTG GCTGGAGGAA AGGGACAGGC CTGGNATATG GCCATCCTGG ATTGGCTTCA 120  
TCAGAGGGAGG CTGAAGGCCG GATGAGGGGC CCCAGTGTG GAGCCTCAGG AAGAACCGAC 180  
AAAAGACAGT CCAACGAGAC TTATCGAGAT GCTGTTCGAA GAGTCATTT TNCTCGATAT 240  
AAAGAACTCG ATTAAGNAAG GNGNCAAGTT CCATGGGATA CAACCTACCT CTTGTTTGT 300  
TTGTCTCTCC TTTTCTTTN 320

SEQ ID NO:2341

LENGTH:519

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02703

SEQUENCE DESCRIPTION:

GATCTGAAAG GAGCAAGGAA CAGCAAGGAA TTATTTCCA GAATGACACC CGCAGCAGAA 60

00881

2153480

TGTTGGAGTG GAAATGATGG CTGGCTATGA AGAGGAGGTC AACGTGTGTG GTCTCCTCAG 120  
TCTCTGTCAG AGGGGTGGGG AGGTGGAAA CAGGAATCCT CTGCAAAGCC CAATCTGCAG 180  
AGTCGAGACC CCTGGTGCTC TCTGCCCGC TGCTGGCAC TGGCTTTG CAGCCAGCCA 240  
CCAACGGCCC CTTGCCCT NCAGAGGCAG AAGCCTNCGT CTNAACCTGC ACCTCTGACC 300  
GTTTNAGCAC CNTTGGGTN TTACCANGTC CTANAACTCT GANATTNTT NGTTCTAAA 360  
GGGGTTTCTA TTTCAACTTG NTGAGTTGT NTTTGGGN CTTCCAATTT GGGNTACCTT 420  
GNTATNTTN ATGGTTTAT AAATCCTNA CTCTTGGNAN GTTTAATTN TTTACAAAAT 480  
CAGGGATAAC TTNGTTNA ANACTGGTT GAAGGAATN 519

SEQ ID NO:2342

LENGTH:272

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02704

SEQUENCE DESCRIPTION:

GATCCCAACT AATTTACCG AACCTAAAAC CCACAAAGAG GTTGTGTG TTATTGTTCA 60  
ATCTTCAGTT GTAAGAGTAA TTCTCTATTT TNATATTGAA ACATAATTAC TTGATAGCTC 120  
AGGGTCTACA TTTCATTCAA CTTTTACAC CAAATTCTGC AGAGTGGTCA AAATGGAATA 180  
TTGGGGGCTG TTGTAAACAG AGGCTTAATT TTATTAGAAG TAGCCAGTTA TTTATTAAG 240  
CATGATGTTA ATAAAATAGG CATATTCTGA AA 272

SEQ ID NO:2343

LENGTH:272

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02705

SEQUENCE DESCRIPTION:

GATCTGACAT GATTCTTCC TGTCTGAAC TGTGGGTGT GCACATCTCT ACTTGAGTCA 60  
GGTTTNAGTA GAGGCTTAGA GACAGTTAGG TGAGAACAAAC CAAAATCTTA TCATGGTCTC 120  
AGTCANNATC ATTAGGGGGA ACTCTAGCCA AATNGTTAA CTTCTGCCTG TGGAACTGGG 180  
GATTGGGTGG GCAGGAAAAG GTGATATCCA TTCTTCTGA TAACTAGATG GTGCTGAGAA 240  
GCTTTGAAT AAAAACTTTG CTAAATGAGA AA 272

SEQ ID NO:2344

LENGTH:273

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02706

SEQUENCE DESCRIPTION:

GATCTTCCC AGGCCGCACC ATTTCTNTCA CTCACATGGA CCCAAGATAN AAGAATGGCC 60  
AAACCCCTCAC AACCCCTGAT GTTTGAAGAG TTCCAAGTTG AAGGGAAACA AAGAAGTGT 120  
TGATGGTGCC AGAGAGGGC TGCTCTCCAG AAAGCTAAA TTTAATTCT TTTTCCCTCT 180  
GAGTTCTGTA CTTCAACCAG CCTACAAGCT GGCACNGCT AACAAATCAG AAATATGACA 240  
ATTTAATGAT TAAAGACTGT GATTGCCACC AAA 273

00882

SEQ ID NO:2345

LENGTH:277

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02707

## SEQUENCE DESCRIPTION:

GATCCATGAA GCTGCCCTGC CCACGCCCTCC CCTCCCTGTA GCAACACCTC TGGGTGTTG 60  
 GAGTTTAGCT TTTGTGGGT TGCTCTCCCT ATCCCATCTC CTGTACTACA CAGTTCATGG 120  
 CAGGGTGGGG AGNNGTGGGG TTGGTTCGGG TGGGTGAGGG TCTTTTCCT CTGTGTGCGA 180  
 TGTTGTTATC TGACAGNTCT CCGTCCCTAC TGGCCTTTCT CCTCGTCTTC ATATTGTAC 240  
 GGTACAAGCA ATAAAGACAC TCATTTCAGA CCAGAAA 277

SEQ ID NO:2346

LENGTH:431

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02708

## SEQUENCE DESCRIPTION:

GATCTTNCTA GGAGGGAGAC ACTGGCCCT CAAATCGTCC AGCGACCTTC CTCATCCACC 60  
 CCATCCNTCC CCANTTCATT GCACTTTNA TAGCAGCGGA ACAAGGAGTC AGACATTNA 120  
 AGATGGTGGC AGTAGAGGGCT ATGGACAGGG CATGCCACGT GGGCTCATAT GGGGCTGGGA 180  
 GTAGTTGTTT TTCCCTGGCAC TAACGTTGAG CCCCTGGAGG CACTGAAGTG CTTAGTGTAC 240  
 TTGGAGTATT GGGGTCTGAC CCCAAACACC TTCCAGCTCC TGTAACATAC TGGCCTGGAC 300  
 TGTTTNTCT CGGCTCCCCA TGTNGTCCTG GTNNCGGTT TNTCCACCTA NGACTGTAAA 360  
 CCTCTTCGAG GGCAAGGGAC CACACCTGT AACTGTTCTG TGNCTTTAA CAGGTTCCN 420  
 CCATTAATGC N 431

SEQ ID NO:2347

LENGTH:268

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02709

## SEQUENCE DESCRIPTION:

GATCTTTGT GTCTGGTTCC TTTCACGTTG AACGCTATT TTAAGGTTCG TGCCTGTTGT 60  
 AGACCACAGT CACACACTGC TGTAGTCTTA CCCCATCCTC ATTCCCAGCT GCCTCCTCCT 120  
 ACTGTTCCC TCTATCANNN NGCCCTCTTG GCGCAGGTTG CCTGAGCTGT GGGATTCTGC 180  
 ACTGGTGCTT TGGATTCCCT GATAATGTTCC TTCAAATCCA CTGAGNATTA AATAAACATC 240  
 GNTAAAAGAA TGACCTCCC AAGGNAAA 268

SEQ ID NO:2348

LENGTH:268

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02710

## SEQUENCE DESCRIPTION:

2153480

GATCAGAAC CAGTCCTT CCCCCTAGTC TGGACTGGGT ATCCCCCTTT AAATNTTCC 60  
AAAGCAACAC AAATTAAATT CCGTCACAGA ACTTGCCACT CTGTGCTGTG TCCTCTGTT 120  
CCTTGCCATC TTCCCAATN AGCTGGAAGC CCATTGGCAG CAGGGACTGT TTCTTGTCA 180  
CAGCTGCACC TCAGTGCTAA GCATAGTGCC TGGTAGGTAA TAGACTCCTT AAGTATTGT 240  
TGAATTAATA AAGGATGNNT TTTTAAA 268

SEQ ID NO:2349

LENGTH:268

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02711

SEQUENCE DESCRIPTION:

GATCAGAAC CATTNATTG GGTAGGTGTG TCAGAAGGGA GAATGATGGN AGACGAACGT 60  
CTGGAAGAGG TCAGAAGATA GCCATGCTAA AATGCAATT AATCCTCATG TTTATCCAA 120  
ACTAATCTG GACTTTCCA CTCATTAGCT TTGTTNTGCC CTTGTTTCCC TTGAAGGTTT 180  
AAGTTCAACC ATATTCTGTC AACTGTTCAAG TTTCAGTGGA ATCTTGATT TCTGGTTCAT 240  
TATAACAAAC TGTTCCCTTA AATCCAAA 268

SEQ ID NO:2350

LENGTH:398

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02712

SEQUENCE DESCRIPTION:

GATCCGAGAA CGCTCTAACG CTGTCACGA GCTCAATAGG GAAGCCTGTA ATGACTACAG 60  
ACTTTGCGAA CGCTACGCCA TGGTTTATGG ATACAATNCT GCCTATAATC GCTACTTCAG 120  
GAAGCGCCGA GGGGCCAAAT NAGACTGAGG GAAGAAAAAA AATCTCTTT TTTCTGGAGG 180  
CTGGCACCTG ATTTTGATC CCCCTGTAGC AGCATTACTG AAATACATAG GCTTATATAC 240  
AATGCTTCTT TCCTGTATAT TCTCTGTCT GGCTGCACCC CTTTTCCNG NCCCCAGATT 300  
GNTAAGTAAT NGAAAGTGCA CTGCACTGAG GGTCAAAGGN GAGGCAACAT ATTNTNNNTT 360  
TCCATAATAA AACTTCTTG GGGNNNATAC TTTCAAA 398

SEQ ID NO:2351

LENGTH:381

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02713

SEQUENCE DESCRIPTION:

GATCTGCAAG CATTGCTCT TGTTCACAC TCACCTCTGG GATATTCAG CTGTTGTTT 60  
CAAATGGCAA ATCATCAACT AAANGCACTT GTTCAAGTT TTGTTCTGCA CTCCCACGAC 120  
TGAAGTTGTA GATTGAGCTG AATAACCATG GGAAGTGANC AAGCAAAGAC ACTCGATTGG 180  
AGTCAGTTGA ATATTGATC CCTCACTGGA GCCCTTCTGG TCTTTCTTC CACTTCTGCA 240  
GAATTCCTC TAGCAAATAC TTCTTCTCC TTGCTTGCT CCACCATGAT ATTTGAATAA 300  
GAGATGGCCA GAGGATAACA CTTGCTCTT AAAAAGTAAG CTAAAAGGA CCTAGGAACC 360  
TTCAATTGTA GCAGTTGGTT N 381

00884

2153480

SEQ ID NO:2352

LENGTH:265

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02714

SEQUENCE DESCRIPTION:

GATCTGCCCG CCTTGCCTC TCAAAGTGTGTT GGGATTGCAG GCGTGACACG TGCTCCTGGC 60  
TTGAATTTTC TTATAATCCC ATGAAACCAT CATCAGAGTC ACAATAATNA ATTTATCTAA 120  
TCTATCACCT TTGTATTACAC CTGGAGCCTT TATAAAGTTT TTNTCTATGC AGACAACCAT 180  
TGATTTACTC TGCTGTATAA TACTTCCAT TTTCTAGAAT TTTCTGACTG ATGTAATAAA 240  
GTGTTTCCCTC TTATAATCCC TGAAA 265

SEQ ID NO:2353

LENGTH:265

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02715

SEQUENCE DESCRIPTION:

GATCGGGGGC TTGAACCCAG GTGGTCAGGC TCTGGAGCCC ACAATTGTNT TACCCACTAT 60  
GCCCTCTCT AGTCATGGTC CCCAAGAGGG GCTTGGAGAC CCACCTAGCA GGTGAAAGCA 120  
ATGGCAGCCT TCCTTATTG ATTATGCACC TAAGAATAAA TGGTATTG TGATGTATTG 180  
CCAATATGTG TATATTATT TATAAATATA TACAGATACT ATNATCTGTA TGTNAGTAAT 240  
AAAGCTAAA TTATTCATT TTAAA 265

SEQ ID NO:2354

LENGTH:379

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02716

SEQUENCE DESCRIPTION:

GATCGGGCGGA CGCCCCATCAC CGTGGTGAAG CAAGGCTTG AGCCTCCCTC CTTTGTGGC 60  
TGGTTCTTG GCTGGATGA TGATTACTGG TCTGTGGACC CCTTGGACAG GGCCATGGCT 120  
GAGCTGGCTG CCTGAGGAGG GGCAGGGCCC ACCCATGTCA CCGGTCAGTG CCTTTGGAA 180  
CTGTCCTCC CTCAAAGAGG CCTTAGAGCG AGCAGAGCAG CTCTGCTATG AGTGTGTGTG 240  
TGTGTGTGTG TTGTTCTTT TTTTNTTN NNNAGTNTCC AAAAANAGCC CTNAAAAAAT 300  
TCAGGGNCT TGAAAAATTN TNTAAATGC CAGNNNTTGG GGAAATNAAA CCCANTAAAA 360  
ACNTTTGAG GGGTGNAAA 379

SEQ ID NO:2355

LENGTH:261

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02717

SEQUENCE DESCRIPTION:

00885

GATCACAAAA CAATTCTAAA ACCTAACGT TTTTACCATT GAAATTAAA TTGTGATAAT 60  
 AGGTTTAAA TGTCTAGAAT GCAACTGATA GGCTTTCTT GAACTGTTAG TTTTTTGAA 120  
 GTAGTTTT CATGTTTANN NNGTATTGT AAAAAAACAA AAAGCAAAA AATTCCAAA 180  
 ACCCAGATAA CAACCGAGC AAAACTGTT TGCTTCTAT TTATCTTGA TTTCAGTCTT 240  
 GGCAATTGTT TAAAAAAAAA N 261

SEQ ID NO:2356

LENGTH:259

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02718

SEQUENCE DESCRIPTION:

GATCATTGGA GAGAGAATTG CACAGAAAGT CCTGAAGTTT AAAACACTTT ATGACCAGCT 60  
 TTGGCTCGGG AGACTGGGGC TGCTTGTAGA ACTGGAAGTG AATAACTTT TCAAGCAATA 120  
 TCAGTGAGTG GGTCCCACATCG ACAGGGTCC AGGACCTGGA ACACTTAAC AGAAGGAAAT 180  
 GCCGAAGCAG CTTGCACAGT NGCTTGACAG ACTTCCAAGN NGGCTGATTC TGGCTTCAAG 240  
 ATGGAGCCTT GGAGTTGGN 259

SEQ ID NO:2357

LENGTH:296

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02719

SEQUENCE DESCRIPTION:

GATCTGGGAG TACACCAGGC AGCAGCTGCT CTCGNACGGA GATACCAAGC CATGATGTGC 60  
 CNNNNTTAGT GAACTGCTGC TGCTGTTCAAG ACTTTTTAA AAAAAACTAT TTGGACTAAA 120  
 GAAACAGATT CTGAAATTAA TTGTGATAAT TTGTATTCT TTTTCTTGC AATTTAATGC 180  
 CAAAAGTTG CCATGTGCCT TAAACATATT ACTATATATT TNCCCCTTA ATAAACACTT 240  
 TTNGTTAAAT TGTATTCTTC CTTTAATAAA ATATTTAAG CAATTGTGGA AATAAA 296

SEQ ID NO:2358

LENGTH:254

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02721

SEQUENCE DESCRIPTION:

GATCAGAATA CATGATGGAT GAAATTCTTT ACATGTTTA GCAGAATNAA TTTGTTAAT 60  
 ATAATAAAAGT TTGCTACTTA TCTGTATGTA GGTTGCTAAA AANGATTTTC TTAACTCAGA 120  
 TTTTAAGCCA AATAACCATT TAACACTAGT ATTTGTTAAA TGGGTTATTT TNCTGTATT 180  
 GTATGTTCA CTATAATAAG GGAATTAAGG ATAATGTGCA TTGAGAATAT TTTGAAAANT 240  
 AATTGACTCA AATN 254

SEQ ID NO:2359

LENGTH:253

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS02722

SEQUENCE DESCRIPTION:

GATCAGTTAT AAGTAGCAGG CCAAGTCAGG CCCTTATTAA CAAGAAACTG AGGAATTTTC 60  
 TTTGTGTAAC TTTGCTCTT GGTAGAAAAG GCTAGGTACA CAGCTCTAGA CACTGCCACA 120  
 CAGGGTCTGC AAGGTCTTG GTTCAGCTAA GCTAGGAATG AAATCCTGCT TCAGTGTATG 180  
 GNAATAAAATG TATCATAGNA ATGTAACCTT TTGTAAGNCA AAGGTTTCC TCTCTATT 240  
 TGTAACATCA AAN 253

SEQ ID NO:2360

LENGTH:253

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS02723

SEQUENCE DESCRIPTION:

GATCAATCCC AAGAACCAT CAGCAACCTC AGACCAAACCC AAGAAGATAA TTTAAATCTA 60  
 TACTGCTTAT TGGTCAATAT ATTGGTTCT AGTATTAATA AAGAAAAATG TTATTAATAAT 120  
 AGCATAACATA GTAGTAAAT AAANTACANA AAGTGTGTTG ATTATAGCT GTTGAGATG 180  
 ATAAAAAGTGN AGCAAAGCCT GTTAAATCAT TGGAAGACTT GGAAANTTAT TTTAAATAAN 240  
 CAATTACATG TAN 253

SEQ ID NO:2361

LENGTH:252

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS02724

SEQUENCE DESCRIPTION:

GATCTGCATA AACAGGGTTC CTGACCTCAC CGAAAAGACT AATGTGCCCT AGAACAAAGCA 60  
 TTTGCTGTGT TTTGTTAGCA CCTGGTTCCA GGACAGACCC TCAGCTTCCC AAGAGGATAC 120  
 TGCTGCCAAG AAGTTGCTCT GAAGTCAGTT TCTATCGTTC TGCTCTTGA TTCAAAGCAC 180  
 TGTTTCTNTC ACTGGGCCTC CAACCATGTT CCCTTCTTCT TAGCACCACA AATAATCAA 240  
 ACCCNACATA AA 252

SEQ ID NO:2362

LENGTH:251

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS02725

SEQUENCE DESCRIPTION:

GATCTTCTCA GCCAGGAGAA GAGGGTGGTG TTTTCACGCG GGCAACTGCT CGCCGGCCTA 60  
 CATGGGGTTA ATTCAAGTCT GCTGCGAGCA CGACTCCGCC CTTGGCACTG GCCTCCAGCA 120  
 AGCCCTGTTG TCTTGTTG ACAGGGGAAC GGGATGGTT AGACTTTCT GCTCAGTGTG 180  
 TAAAAAAATGT AGCTAAAGCC ACTATTTTG CTCTCCTTAA GCTGTTCAAT AAACCGGTT 240  
 CTCATTTAA A 251

2153480

SEQ ID NO:2363

LENGTH:308

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02727

SEQUENCE DESCRIPTION:

GATCTGGAAC ACTCCCTGA CCCCTTCACA CCTGGCCCTC CCTGGGCTTA AAGCTCCTGA 60  
TATTCTCAT CCCCTTCCTT GTTTTCCAGA ATCGGTGAG GTGGACGGTT TGGCCGTAAA 120  
GGTGTGGCTA TTAACATGGT GACAGAAGAA GACAAGAGGA CTCTTCGAGA CATTGAGACC 180  
TTCTACAAACA CCTCCATTGA GGAAATGCC CTCATGTTG CTGACCTCAT CTGAGGGGCT 240  
GTNCTGCCAC CNAGCCNCAG NCAGGGCTCA ATCTCTGGGG GGCTGAGGGA GCAGCAGGGA 300  
GGGGTGGN 308

SEQ ID NO:2364

LENGTH:245

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02728

SEQUENCE DESCRIPTION:

GATCGTAGAT TTTAACAAAT CTGTATCTT ACAATTCTG GGTGCNAGTG TNAGAGTGTG 60  
AGCAGGGCTT GCTCCTGCCA ACCACAAATC AATGAATCCC CGACCCCCCT ACCCCATGCT 120  
GTACTTGTGG TTCTTTTT GTATTTGCA TCTNACCCCG GGGGGCTGGG ACAGATTGGC 180  
AATGGGCCGT CCCCTCTCCC CTTGGTTCTG CACTGTTGCC AATAAAAAGC TCTTAAAAAC 240  
GCAAA 245

SEQ ID NO:2365

LENGTH:249

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02729

SEQUENCE DESCRIPTION:

GATCTAACCA ACTCAACTGA TAGAAAGCTG AATTGTTCCC AGTGGACAAG TGGTATTTGA 60  
TGTGTTAGCAG GTTTTTTGT TGTTATTTT TTGGTAAACT CTGTGGTAAA ATCTAAAATA 120  
ATGTTAAAAC CCTAAAAGTA ACTATTGANT ATNCTGTAAT CTTAGACATG TATTTTCAA 180  
GCTAACCCCT TGAAGAAATG TGTTCAAGGT AGGAAAATAT AAAATTTTT GGTTATTTGT 240  
AAATTTAAA 249

SEQ ID NO:2366

LENGTH:240

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02730

SEQUENCE DESCRIPTION:

GATCATGCAT TGTTGAGGTG GTCTGAATGT TCTGACATTA ACAGTTTCC ATGAAAACGT 60  
TTTATTGTGT TTTAATTAA TTTATTAAGA TGGATTCTCA GATATTATA TTTAATTN 120

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ATTTTTTCT ACCTTGAGGT CTTTGACAT GTGGAAAGTG AATTGAAATG AAAAATTAA 180  
 GCATTGTTG CTTATTGTTCAAGACATTG TCAATAAAAG CATTAAAGTT GAATGCGAAA 240

SEQ ID NO:2367

LENGTH:251

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02731

SEQUENCE DESCRIPTION:

GATCTATACT GTGTGGTCAT GAGTTGTGTA TAGTTCCATA ACACGTATT TTNCTNCTGT 60  
 CAGTACCCCT AGGATAACACT NTAAAACACC TTAAGGTCTG ATGTTATGGC AACAAACTAC 120  
 TTNTTCAAAC CTAAATAGGA ACCATGTAAT TNCTAAAG TGATTGAACA GTTGCCCCAC 180  
 ACTTAGTTG TTGGTCTTAT GTAAAACATT GGCTCAAAAT AAAGNNCACA CTGATTATT 240  
 TNACTGNNA A 251

SEQ ID NO:2368

LENGTH:239

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02732

SEQUENCE DESCRIPTION:

GATCTGAAAA TTTATTTCAC CCAGCTTC CAATTAAGTC TGTATAAAAT GTGGTACCTT 60  
 TTNGTACCTA TCCAGAGAAA CCTGTACATA TTCAATGTTA TCTAGATGTG ATTGGATAAT 120  
 GGAGAAAATN TATTTATAAT GATTTNCAA TGGCATCAAT AACATTTAAA TGATTTGAA 180  
 GAAGTATTAT TTTACTACCC TATAAAATGA ATCGAAAATA ATAAAGTTCT TAACATAAA 239

SEQ ID NO:2369

LENGTH:239

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02733

SEQUENCE DESCRIPTION:

GATCAAATTA TCTTCAGCAT GTATATCTGG GGAAAAAAGG TCCGAATTTCACATTTATA 60  
 TTAAANTTC AATTTTTAT ATTTAAANTT CAATTTTTA GCAACAGCTG AATAGCTTG 120  
 CGGAGGAGTT TAATAGTTAC ACATTCAATGC TAATATACAT TNCCTTAAA CATCCACAAA 180  
 TTCTAAAAA GATTGAATCA GTANATTCA TTTCAGCTAA AAATGGAGTC TAATATATN 239

SEQ ID NO:2370

LENGTH:237

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02734

SEQUENCE DESCRIPTION:

GATCCACCCG CCTTGGCCTC CCAGAGTGCT GTGATTACAG CTGTGAGCCT CCGTGCCAG 60  
 GCCAGTGTTC TCTCTAAAT GTGTTCAAT ATGGTGGACA TTTATTGAGC ACTTGTGTTG 120

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GGCGTTCAA CAGGAGGCAC TGGTACGAAA AGTAGCTTGT TCTAGTCAT ATATCATTG 180  
CACTTGCTT AACTGTATA AGTACTTTT ACTGTTAAT AAATATTAA TAGAAA 237

SEQ ID NO:2371

LENGTH:236

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02735

SEQUENCE DESCRIPTION:

GATCAAAGA GCAAACAATA CTTCTATGG CTTATCAGCA GGAGTGTAA CCAAAGACAT 60  
TGATAANCC ATAACAATCT CCTCTGCTCT GCAGGCAGGA ACANTNTGGG NGAATTGCTA 120  
TGGCGTGGTA AGTNCCCAGT GCCCCTTTGG TGGATTCAAG ATGTCTGGAA ATGGNAGAGA 180  
ACTGGGAGAG TACGGTTCC ATGAATATAC AGNGGTCAAA ACAGTCACAG TGAAAN 236

SEQ ID NO:2372

LENGTH:236

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02736

SEQUENCE DESCRIPTION:

GATCCNATTC CGTTGCCCTC AAAGCACCAAG CTCTCTCGCT CCATCCTCCC AAGAGCCTCC 60  
AAGGCGCCAT TGGCTTCCTG GGACTCTGAG TCTGCCGGCC TCTTTCTG ACTCCAGTTT 120  
CTTCTGGCT GAGCCAATGG GGCATGTTCT GTGACTGCAT TTGCATCTCG GATTGTGTTT 180  
TTAAACCCAT TTTCTCCAT ATTGCTGA AAAATATATA GAAACTGATA TACAAA 236

SEQ ID NO:2373

LENGTH:245

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02737

SEQUENCE DESCRIPTION:

GATCAGGCTG GTACAGGATG CCTTAAGGTG ATGAGAGGTG AGGGTGCATG AAGAATAATG 60  
AGCACAGGGA AGAGAGAACG AGGACAAAGT AGCAGATAAA ATGCCGGCAA AGCACAGATG 120  
ANTGTTTCA AGAAGCTCTT GTATTNTNT GCACAGTGTAA ATATCCTTG CTATTTCAGG 180  
ATGGCGGCTG GCCTGCTCAG TAACATACAT GTTCCAAATA AAGATTTGC ATGAAAGTAC 240  
CTAAA 245

SEQ ID NO:2374

LENGTH:231

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02738

SEQUENCE DESCRIPTION:

GATCTGACTG CCTCCTTCT CTGGCCTCTN CCCCTNCCC TCTTCTCTC AGCTAGGCTA 60  
GCTGGTTGG AGTAAATGG CAACTAATTCAATTTAAATA TTTGGGGTTT 120

00890

2153480

TGGTTTAAA GCCAGAATT CCGCTAGCAC CTAGCATTG AGCAGAGGGA CCATTTAGA 180  
CCAAAATGTA CTGTTAATGG GTTTTTTT AAAATAAAN GATTAAATAA A 231

SEQ ID NO:2375

LENGTH:236

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02739

SEQUENCE DESCRIPTION:

GATCCACTGT GAGCACCAAC CTGCTGCAGT CTCTTGGGCC CCTGCTGGCA GCTCTGCCAC 60  
GTCACCGNCT GCCTGGCTCC CACACAGCCA TGCATTGTCA CTCTGCCCTCC GGGACCCNAG 120  
CTTNGGAGCN NNTGGGTCTG CCAGGTCCCA CCTCCTCTGT CCCCNATGCC ACAACCTGGG 180  
CTCCTGGCTA CAGCAGGGNT CCAGGGACTN CAAATAATG TTCAGTGACT GGCAA 236

SEQ ID NO:2376

LENGTH:235

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02740

SEQUENCE DESCRIPTION:

GATCGGTAC ACAAGCTGTT CCACGATAAT TTTGTNTCA NAAGGGGAGN CTGACTACCA 60  
GGACCACTGG CCCCCACTTCC AGCCCCTCCA TTCTNAGTAC ACTTCAGAGG GCTCTGGCAG 120  
GGTAGGGGG TCTTGNCCGT GCCACAGAGA GTAAAGGTCT AGCACACCA TTGTGGAGAT 180  
ATTCATGGG GACANCCAG TGACTTCACT TTGAAGTAAA GTGGGATTT CAAA 235

SEQ ID NO:2377

LENGTH:253

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02741

SEQUENCE DESCRIPTION:

GATCGNAGGC TACCTGGCT CAGTNACCAG CTGCTCACTG TGTCTTCTG TGGTCTCAGG 60  
AGCTGCAGTT GTTGTGTTG TATGAATAGA CGATAGTNA TTAGACTGGA TGTGTCTGTA 120  
CTGGCAGTNA TTTTCCAAT NCCTCTGTAT AAGCAATACA TTTGTAATC ATGGGAATGT 180  
ATTAATGGT AATTGCTGT GGTGGTTGTA TCATGATTAA NTNNTATNAT GAGCTTTGG 240  
CTTTNTNTAT NTN 253

SEQ ID NO:2378

LENGTH:232

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02742

SEQUENCE DESCRIPTION:

GATCTGGGGT CCCAGTGTCA TTGGTGAAGG CCTTGGGATT CGAGGCAGCT GAGTCCTCAC 60  
TGACCAAGGA TGCCCTGTG CTTACTCCAG CCTCCTGTG GAAACCCAGC TCTCCTGTCT 120

00891

CCCAAGTGAAG ACTTGATGG CAGCCATCAG GGAAGGCTGG GTCCCAGCTG GGAGTATGGG 180  
 TGTGAGCTCT ATAGACCACATC CCTCTCTGCA ATCAATAAAC ACTTGCTGA AA 232

SEQ ID NO:2379

LENGTH:232

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02743

SEQUENCE DESCRIPTION:

GATCTCTGAA AAGNAGGTTT CAGGCCACGAG GCAGCTGNTC CCAGGACACT GAGGCCAAGA 60  
 GAAATGTAAC AGAGCCACAG CTCCACAGGC CTGCACTCGG AGTCTGGGGC CTCTGCAGAG 120  
 CCAGCAAGGG GAAAAGTATA ATCTGGGGGA CCTTCAACCA CTAAGCCTCT TGTCAGAGCC 180  
 CTCAGGCAGG CAGATGTGTC ACCCAAATAA ACAGTGTAT TGTCTCCAGA AA 232

SEQ ID NO:2380

LENGTH:232

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02744

SEQUENCE DESCRIPTION:

GATCTNAGCT GGACAGAGGA GGAGGAAGAG GAGGAAGCAA TGGGGGAATA GTGACACCAAG 60  
 ACAGTTGATG TCTAGATAGG ACCTCAATNA TTCCNTTAGA ATCTNAGATA CCAGGATATT 120  
 GTTGGCCATG TGGCATCATT GAGCAGCAGG AGGCTGAAGG AGGNGAGAAC AAAATTGTCC 180  
 AAACCATGCT GTTTTTTCC CTTAAATAAA TCTTGTATTTC TTCAGTTCA AA 232

SEQ ID NO:2381

LENGTH:236

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02745

SEQUENCE DESCRIPTION:

GATCTANGGA ACCAACCGGA AGGTTTGAG GTGATGTAGG TCTTCACAG TTAGCTTG 60  
 GGAATACAGA ATACTCAAAT AAAGTGCTTT GTTATTATTT CAGAGGAAAT GGCAGATTGAA 120  
 ATGTTACAAC AGAGATTCT TGGTGGTAGC TATTTNGGTA AAGGGTATAT GGNTATTTT 180  
 CTGTACATGT GAAATTATAT AGANNTAAAAA GTTATATANA TTACATTGGC CAGAAA 236

SEQ ID NO:2382

LENGTH:229

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02746

SEQUENCE DESCRIPTION:

GATCAAGTTT AAGTCAGTCA GTTAAGGGGA GGAGAAGGAG AGGTTATACN TTCAGGGGC 60  
 TACCAGACAG TGTTCTAAC TTGGTTAAGG AGGAAGAAAA CCCAGTCAAT GAAATTCAAT 120  
 GAAATTCTG GAAACTCCA TTAAGTGTGT AGATTGAGCA GGTAGTAATT GCATGCAGTT 180

TGTACATTAG TGCATTAAGA GATGAATTAT TGAGTNCTTA AAGATTAAA

229

SEQ ID NO:2383

LENGTH:227

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02747

## SEQUENCE DESCRIPTION:

GATCTGATT CAGATTTTC CTGTATCTT TTTACATACA TCAGAAAAAG AAATGTTTAC 60  
 TATATTTTG GTTCCATTNA TGATTGTTT AAGCATTGGA CGNATAAGGA AAACTAACAA 120  
 TTAANTCAAT TAGAAAAGCA ACATAAAATT AANTGATATT TAGGAAATCA GTTATATGTG 180  
 AGCTTGGGTA TTCAAATGTC ACAANTAAAA GGCNTANACC CATNAAA 227

SEQ ID NO:2384

LENGTH:223

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02749

## SEQUENCE DESCRIPTION:

GATCAAATNA CCTGTGAAGG AATATTTGC CTTCATCCTA GCTGCTGGGG AAGCGGGGAG 60  
 AGGGGTCAGG NAGGCTATG GTTGCTTCC TGAATGTTTC TGGGGTACCA ATACGAGTNC 120  
 CCATAGGGNC TGCTCCCTCA AAAAGGGAGG GGACAGATGG GNAGCTTTN TNACCTATT 180  
 AAGGAATACG TGCCCTTCC TTAAANNCTT TCATTGATTG AAA 223

SEQ ID NO:2385

LENGTH:221

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02750

## SEQUENCE DESCRIPTION:

GATCAGGGTT TNGGGCTGT GTTCTTCTA CCGTCAGCAC CTGTGTGGTC AATTCTGGAC 60  
 ACTTCCCAGA GAAGTCTTG AGTAGAGAAT CCTACTCAA TTTCACTGTA TATNTTAAGC 120  
 ATTCCCTCTCC TNTCCCNNTG CCTNCCCTGT TGCCTNTCT TCCCCTGATT TCTCCCTGG 180  
 TCATCTNCTC TCCCTNCTGC GTGTAAGCCA TGGGAAAGGG N 221

SEQ ID NO:2386

LENGTH:220

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02751

## SEQUENCE DESCRIPTION:

GATCATGAAA ACAATGTAGG TAAAGTAAAG TATGTATTTG TCTGTGCTTG AAAAATATTG 60  
 TAAAATGTTA TGTATTTGGA ATATATTTG TGGTTTGCT AATATTTATA AACACAAC 120  
 GGGGTGAATT CACANTGAGT TTATTCATT GAAATACAG AGATATGGGG GCCATGTTAC 180  
 TGTGCTTGGN GCCTTACCT TTGTATAGTG AAATTTCCAN 220

SEQ ID NO:2387

LENGTH:220

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02752

## SEQUENCE DESCRIPTION:

GATCCGCCTG CCTTGGCCTC CGGAAGTGCT GGAATTACAG GCATGAGCCA CTGCTCCTGG 60  
 CCTAAGATGT TTTTAAATA ATGTTTTAA CAAATTTA AGAATTTT TAACATAAGT 120  
 TATTTATATT TGGAATAATT CGTTAATGAT TTGTGTCATT TCCCCAACCC CTTTTAAAT 180  
 TTGTGAATTG GAGGACTGGA TTAAAAGATA AAAAGTTAAA 220

SEQ ID NO:2388

LENGTH:339

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02753

## SEQUENCE DESCRIPTION:

GATCTAATTA ATAGCTGACC TCCCAAATCT GACAGGATAG ACAC TGCAAGGCC 60  
 TGCCAGCCCC TCAGACGCAC AAAATGCGTA AAACAAATGC ATCCTTCCT GGCTAAGCGA 120  
 GTATTACTCT CTTAGCCCTG CACCAAACCT CCAATCTAGC CACATTAAAC TNTCATTTC 180  
 TTAGACCCGC AGAGTGCTT CCTGCCTCTG AGCTGTGAGT GTTGTCCCT TTGCCCGGGA 240  
 TGCTCTGTT TTTAACACCA GTTCAAGTCC CACTCTCTCA GTGAAGCACT CCCTCCCCA 300  
 CTNATAGCCT TTAGTGAACC CTCGTTCTT GCTTCTTN 339

SEQ ID NO:2389

LENGTH:219

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02754

## SEQUENCE DESCRIPTION:

GATCCATGTG CAGTAATGCC TGGTGGCTCC AGGTCTGCC CGCCGTCTG TGGGGCTGTG 60  
 AGCTTTCCA GCCTCTGCC CGTGTGTTGT AATATCATTC TGCTCTAGC TGCAATTCCA 120  
 GCCCAGGCTG TTTGGCCTG CCCAGGAATG GTATNAATTG CCCTGTTCT CTTGTAGCCA 180  
 GTTACTAGAA TAAAATCATC TACTTTAAAA TCTTCAAA 219

SEQ ID NO:2390

LENGTH:219

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02755

## SEQUENCE DESCRIPTION:

GATCTTGACC GGGAAAAGGG ACTTGAGAGA ACCTTCTAGG ATAATTNAT TTCTTGATTA 60  
 GGTGGTGGTT ACATTGTAA AAATCATCGA CCTCTAAATT TAGGGTTGT GCCCTTCACA 120  
 TACCTTGTG TATGCATTTT GCCACTTGTT TTTCAAAGC AATGAAAAAG TATCACTGCA 180

ATTAGGTTT AAATAAATTT GTTCGTTAA CATGTAAA

219

SEQ ID NO:2391

LENGTH:218

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02756

## SEQUENCE DESCRIPTION:

GATCTGGAAT CGGGGTCAAG GGGGCTACAG TCCTTCCAGG GGCTNTGGGG CAGCTCCCAG 60  
CCTCTTCCA TGCTGGTGGC CACCGTGTCC CTTGCTGCAG CTGCATCTTC CAGTCTCTCC 120  
TCCGTCTCC AGTGGCCGCT CTCTTATAA GAACCCTGGT CATTGAATTT AAGGCCACC 180  
CCAAGTCCAG AATGACCTCG CAAGACCCTT AACTCAAA 218

SEQ ID NO:2392

LENGTH:217

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02758

## SEQUENCE DESCRIPTION:

GATCCATTAA TAATGGTTCA TTTCCTTTAT GGTATATAA CTGCACAGCT GAAGATGAAA 60  
GGGGAAAATA AATGAAAATT TTACTTTCG ATGCCAATGA TACATTGCAC TAAACTGATG 120  
GAAGAAGTTA TCCAAAGTAC TGTATAACAT CTTGTTTATT ATTTAATGTT TTCTAAAATA 180  
AAAAATGTTA GTGGTTTCC AAATGGCCTA ATAAAAN 217

SEQ ID NO:2393

LENGTH:216

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02760

## SEQUENCE DESCRIPTION:

GATCAGAGGA ACTTNAGGT GTCTGCCGGC TAACATTGTG TCATTCTGG AGTCCACAGT 60  
ACACGTCCCC TGCCTCAACA GGCACAGCTC TCACAAAGCT CTTCAAGCAT GGAAGTGGGA 120  
GTTGTGTTGT ACTTCATGGC ACTCTGATGC CTGCTGTCTC AGTGTGGT TATTATGCAA 180  
ACAAGTAATG TTGAAATAT ATAATAGCAC TGGAAA 216

SEQ ID NO:2394

LENGTH:215

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02761

## SEQUENCE DESCRIPTION:

GATCCATTTC TACCTGCATT TCCCAAGAGGA CTAGCAGGAG GCAGCCTTGA GAAACCGGCA 60  
GTTCCAAGC CAGCGCTGG CTGTTCTTC ATTGTCACTG CCCTCTCCCC AACCTCTCCT 120  
CTAACCCACT AGAGATTGCC TGTGNCTGC CTCTGCCTC TTGTAGAATG CAGCTCTGGC 180  
CCTCAATAAA TACTTCCTGC ATTNNCTGN NNAAA 215

SEQ ID NO:2395

LENGTH:214

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02762

SEQUENCE DESCRIPTION:

GATCTAAATG TAAAAGCAAA TGAAAAATGC ATGTNTTTT NCCTGTCAAA CATGTATAACC 60  
CTTATGTATA GAGACCGAGTA GTCACTATG GTGACTGAAA CAGGATTATG TAATCCCTAA 120  
AAAGCAGAAT ATGTAAAANTCACATGTATG CGTTGGTTT AGGAATGTNC TTTTGACTT 180  
CCACTTGAAT AAAGGTGTGT TTGGTATTCT GAAA 214

SEQ ID NO:2396

LENGTH:212

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02764

SEQUENCE DESCRIPTION:

GATCCAGAAA TTCAAACCTTC GAGAGCAGAT GGAACGACAT CTAAATCTNT GAATAAAGCA 60  
GCAGGCCCTGT CCTGGCCGGT TGGCTTGACT CTCTCCGTGTC AGAATGCAAC CTGGCTTTAT 120  
GCACCTAGAT GTCCCCAGCA CCCAGTTCTG AGCCAGGCAC ATCAAATGTC AAGGAATTGA 180  
CTGAACGAAC TAAGAGCTCC TGGATGGGTC CN 212

SEQ ID NO:2397

LENGTH:212

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02765

SEQUENCE DESCRIPTION:

GATCTATTAA AGTGTCAACT TTGCATTATA GAACTGAACA TGAAGTAAAT TGAGTGTTC 60  
TGAGTTTNCT ATAGAAAATT TATGCTACCT CTCATCTTT CACATACAAA TAAGCAACTT 120  
TTAATGAAGG CTTAGGGTGN AAATTTAAT TTAGCACTT TACATTACAT GATGAATGGT 180  
GAATATTAAA GGACTTGAA CATTAAATA AA 212

SEQ ID NO:2398

LENGTH:213

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02767

SEQUENCE DESCRIPTION:

GATCGAGAAG CTGCTCAATT ATGCACCCCT GGAGAAAGTGA CCACGCTGAA ACCCACCCAC 60  
CCGCTGTGCT GACCATGGGC CCTGAGCGTC CTACCCGAA TTCACGGAGGC TGAGGCATCC 120  
GGGAGCTGGC GTAATGCCCTG GCCCAGTGT GTGTGTATCC CATAACCCAC TCTGGAAGGA 180  
ACCATCCAGT AAAGGTCTTT CAGAACCACT AAA 213

2153480

SEQ ID NO:2399

LENGTH:211

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02768

SEQUENCE DESCRIPTION:

GATCAGAGAT GCACCAACAA GCCAAGGGAA CCTGTGTCCG GTATTGATA CTGCGACTT 60  
CTGCCTGGAG TGTATGACTG CACATGACTC GGGGGTGGGG AAAGGGGTGCG GCTGACCATG 120  
CTCATCTGCT GGTCCGTGGG ACGGTGCCCA AAGCCAGAGG CTGGGTTCAT TTGTGTAACG 180  
ACAATAAACG GTACTTGTCA TTTCGGGCAA A 211

SEQ ID NO:2400

LENGTH:211

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02769

SEQUENCE DESCRIPTION:

GATCAGACAC CCCTTCACGT GTATCCCCAC ACAATGCAA GCTCACCAAG GTCCCCCTCTC 60  
AGTCCCCCTC CCTACACCCCT GACCTGGCCA CTGCCGNACA CCCACCCAGA GCACGCCACC 120  
CGCCATGGGA GTGTGCTCAG GAGTCGCGGG CAGCGTGGAC ATCTGTCCA GAGGGGGCAG 180  
AATCTCCAAT AGAGGACTGA GNACTGCTAA A 211

SEQ ID NO:2401

LENGTH:206

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02770

SEQUENCE DESCRIPTION:

GATCACCTAC TTACTGTATT CTACATTATT ATATGNCATA GTATAATGAG ACAATATCAA 60  
AAAGTAAACAT GTAATGACAA TACACTAA CATTCTTGTAA GGAGTGGTTA GAGAAGCTGA 120  
TGCCTNGNTT CTACATTCTG TCATTAGCTA TTATCNTCTA ACGGTTCACT GTATCCTTAC 180  
AGGAATAAAA GCAGCATNTG GNTAAA 206

SEQ ID NO:2402

LENGTH:205

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02771

SEQUENCE DESCRIPTION:

GATCGAATGA AGGATTCAAA ATTAACCACT CCAAGGGGG ATTGAAGGAA GAACCACTCT 60  
TAATGGACAA AAAGAAAGAA AGGGGAGGGAA GTAACAGGGAA TATNAGCTCT AGCCGCCCAA 120  
GCTAGCAATG GCAACCCCTC TGGGTCCCCT TCCAGCATGT GGAAGCTTC CTTTCCCTTC 180  
ATTCAATAAA CAGCTGCTGC TCAAA 205

SEQ ID NO:2403

00897

LENGTH:228

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02772

SEQUENCE DESCRIPTION:

GATCTATAGA CATNAGGAAG GGAGTNAGAC GGCTCCTCCA CCATCCTCAG CCAGTGCAAC 60  
CCATTCCCTC TNCTTCTCTC TCTCTCTC TCTCTCCCTC CCTCTCCCTC CCTACCCCTCT 120  
CACCATCTT NTTGGCCTCT CTNAGGGTCT CTCTGTGCAT CTNTTAGGA ATCTNGCTCT 180  
CACTCTCTAC GTAGCCACTC TCCTTCCCN ATTNTGNGT CCACCCNN 228

SEQ ID NO:2404

LENGTH:273

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02773

SEQUENCE DESCRIPTION:

GATCTAGCTA GGGCTTGTC TNTTCATCTT TGTGCATAAC TTACCTGTTA CCAGTATAGG 60  
TGGGATATAC ATNTATCTTG CAGGAAATTC CCCAAAGCTC AGAGTCCAGT TCCTTCCATA 120  
AAACAGGCTG GACAATGAC CACTATGTTA GACCCCCCGG NTCGACTTCA GGGGTCAGTG 180  
TTCCTGTCCC AAACCCNCAC ACAGAATNCT CTGNCTGNGG TTCATGTNGA AACTGAGCAA 240  
AAACTANAGT ATCTNTCAAN ANGTGTAACN TGN 273

SEQ ID NO:2405

LENGTH:203

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02774

SEQUENCE DESCRIPTION:

GATCCACCTC ATATGTGAGT CCGTCCAAAA GATGTTACTG CTCTGGGTGG GCCAGTGTTC 60  
TATATCGGTT ATACTAACTT TCATTTAAAG TATTTATTCT AAAATGCCCTC TGAGAACAG 120  
TAAAAAATAAA AAACAACAAG TTGTCTAAAA TGCAACAGCT TTTATAGTAA ATGTACATTT 180  
ATAAAATAAA TACTCAAATC AAA 203

SEQ ID NO:2406

LENGTH:203

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02775

SEQUENCE DESCRIPTION:

GATCTCTGAT GGATTTGTT ACTCCTCTGT GGGAGAAAGG CTTGGTCTAC TGCAGGTGTT 60  
AACGCTAACG CAGGCTGGAG CTGCGGACGT NAGTTTCCTC AGCNCCCCG TGTTCGCTTC 120  
GAACGTNACC TCGACGTCTG CTCTCCCTT CCCTTTAGCT GACAATGTGA CAGTNCTTGA 180  
ATAAAAGTNA GTCTGACAGG AAA 203

SEQ ID NO:2407

2153480

LENGTH:205

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02776

SEQUENCE DESCRIPTION:

GATCTGAATG TGAATTCTA ATTGTATCG ACGTTAATGT TTTAAAGCTA TAACAAAGTT 60  
TAAAATTCT ACTTTTGTT TTTNATTAT TTTAACTGTT CTTTTATCTA TTAAATTGTT 120  
GTATGTGGAT GGGGAAGTT TGTTCTCCT CTTAGCATTT GTTTCTATAA CCAGAAATAA 180  
AATTCTATAT TAAAGAACATG ACAAA 205

SEQ ID NO:2408

LENGTH:201

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02777

SEQUENCE DESCRIPTION:

GATCCCAATC TGAGAAAAGG CAAAAGAATG GCTACTTTT TCTATGCTGG NGTATTTCT 60  
AATAATCCTG CTTGACCCTT ATCTGACCTC TTTGGAAACT ATAACATAGC TGTCACAGTA 120  
TAGTCACAAT CCACAAATGA TGCAGGTGCA AATGGTTAT AGCCCTGTGA AGTTCTAAA 180  
GTTTAGAGGC TAACTTACAG N 201

SEQ ID NO:2409

LENGTH:200

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02778

SEQUENCE DESCRIPTION:

GATCTTTAAC TGCCCTGCTGA TAAGATATTG GGCCAAGTGA AAATAGAAAT TGTTCTTCT 60  
TAGAAAATATT TTAATGCTAA CTTGTTAGTT TTCCTCAGAA AGCTAGTATT TGAAGCCATT 120  
CGAGTTTAAG ATNCTCTAAT TTCAATAAAA TAGCTTCAAAT ATATTTAAAA TGTAATAAAA 180  
TATATGTTG ACACCTCTAA 200

SEQ ID NO:2410

LENGTH:198

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02779

SEQUENCE DESCRIPTION:

GATCAAAACG CTCCATCTTT TTACAGTGGC ATAGGAAGAC GGCAAAATT TCCTAAAGTG 60  
CAATAGATTT TCAAGTGTAT TGTGCCCTGT TCTAAACTT TTATTAAGTA GGTGCACTTG 120  
ACAGTATTGA GGTCAANNNN TATGGTGCTA TTTCANTNAG TCTAGGTTA GGCCCTTGTA 180  
CATNTTGCCC ATAACCTNN 198

SEQ ID NO:2411

LENGTH:198

00899

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02780

SEQUENCE DESCRIPTION:

GATCTGCCCA TTGCTGAAAC TTCAGTACTT AAGTCCCTA TTATNATTGT ATGGCAATCT 60  
ATCTGTCCAC TCAGAAGTTA TTATATTTGT TTTATATGAT TGAGCACCTC TGTTTGGGT 120  
ATATATGTAT TTACAATNAC TATAACCTCT TGCTGAATTA ACCCCTNTTA CCATTATGTA 180  
ATAAACTTAT TTCCCAA 198

SEQ ID NO:2412

LENGTH:198

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02781

SEQUENCE DESCRIPTION:

GATCTTGAAAT CACTTGACAG TGTTTGTNG AATTGTGTTN GTTTTNCCCT TTGATGGGCT 60  
TAAAAGAAAT NATCCAAAGG GAGAAAGAGC AGTATGCCAC TTCTTAAAC AGAACAAAAC 120  
AAAAAAAGAA AATTGGGCTC TNTTCTAATC CAAAGGGTAT ATTNCCAGCA TGCTTGACTT 180  
TACCAATNCT GATGACAN 198

SEQ ID NO:2413

LENGTH:359

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02782

SEQUENCE DESCRIPTION:

GATCCAAAGT AACTAACAG GAGCCCACAA GACGGTCTGC CAGATTGTCA GCGAACCTG 60  
CTCCACCAAA ACCTGAACCC AAACCAAGAA AAACATCTGC TAAGAAAGAA CCTGGAGCAA 120  
AGATTAGCAG AGGTGCTAAA GGGAAAGAAGG AGGAAAAGCA GGAAGCTGGA AAGGANGGCA 180  
CAGAAAATCTG NTTCTGTAGA TAACGTGGGA GAATGANTTG TCATGAAAAT TTGGTGGTTG 240  
ATTTTTTTGT NTGTCTGGG ACAACTTTA AANGCTATT TTNCCANGTN TTTTNGTNN 300  
TTGGTTTTT TTTAGGGNT CTNCTGTTG GCATNCGGNA GTTTTTANG GTTGGNCN 359

SEQ ID NO:2414

LENGTH:198

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02783

SEQUENCE DESCRIPTION:

GATCCCAGGG GTGCACATGG GCCCCTTGGG TGTCTGAACA GAAGGGCATG GNAGGAAGGG 60  
CTGCACCCCT GCAGTCTTAC TCTGCTGGTG TAGCGGGCAG CTGCCCACTC CCACCCACC 120  
CTGCACCGCG GGCTCCTNAG TCGGCAGATT AAGCATTNA TAAATTGTAT TTTAAATACA 180  
TGTTTTAAAC TTGTCAA 198

SEQ ID NO:2415

00900

## **DEMANDES OU BREVETS VOLUMINEUX**

**LA PRÉSENTE PARTIE DE CETTE DEMANDE OU CE BREVET  
COMPREND PLUS D'UN TOME.**

**CECI EST LE TOME \_\_\_\_\_ DE \_\_\_\_\_**

**NOTE: Pour les tomes additionnels, veuillez contacter le Bureau canadien des  
brevets**

2153480

## **JUMBO APPLICATIONS/PATENTS**

**THIS SECTION OF THE APPLICATION/PATENT CONTAINS MORE  
THAN ONE VOLUME**

**THIS IS VOLUME 3 OF 8**

**NOTE: For additional volumes please contact the Canadian Patent Office**

## **DEMANDES OU BREVETS VOLUMINEUX**

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2153480

## **JUMBO APPLICATIONS/PATENTS**

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THAN ONE VOLUME**

**THIS IS VOLUME 4 OF 8**

**NOTE: For additional volumes please contact the Canadian Patent Office**

2153480

LENGTH:167

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02785

SEQUENCE DESCRIPTION:

GATCCCACATCC ATCAGCTCCC TTTCTTTT CCCTGAACT GTTCTGGCCT CAGACCAACT 60  
CTCTCCNNNN NTAATCTCTC TCCTGTATAA CCCCACCTTG CCAAGCTTC TTCTACAACC 120  
AGAGCCCCCCC ACAATGATGA TTAAACACCT GACACATCTT GCANAAA 167

SEQ ID NO:2416

LENGTH:196

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02786

SEQUENCE DESCRIPTION:

GATCTGTGAT TGGNTGGTTA ATGGGAAACG GTTTTNCT TTGGCTGCAG GTGTTCTGCT 60  
GATATCAACA GCTTCCTAT TTTNAATGCA GAAAACAGGG TCTGGGACAT TAGTCGTTAT 120  
ATTTNACTTG AAAAGAAAAGA AACCAAGTGC GCTTGCAAT ATTATTACA CAAAGAACTT 180  
GCTGCTGCAT TCTAAA 196

SEQ ID NO:2417

LENGTH:194

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02787

SEQUENCE DESCRIPTION:

GATCACAGAT TTCCCTGCCA GGGTGTCTGT GGTTATCAGC TGCAAGGCTCA GCTNGGGTCG 60  
GCCGNTTCAC ACAAGCCACT CTGTACCAACG TGCCCTACCT TAGTGACGGG AGTAAGGAGC 120  
TTCCCTTCCCC TCCATGTCAT TCCCNCTGT TCCNTNCATT CCCCAACAGC AAATAAAACT 180  
GTTGAATGCT CAAA 194

SEQ ID NO:2418

LENGTH:193

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02788

SEQUENCE DESCRIPTION:

GATCTTCCTA CGCACACAC AAACGTCAGT TAATGTTCCA TCCATGCTGC TTAAAGAGCA 60  
TTCCTGTCT AGTAAAATGG GCAAGTCCCT CTACCCCCCA CCCTCACCTG GTATGCTTAC 120  
ATTAATAGCT AAAGTCAATC CTGTAATGAA ATAAGCAAG TGGTAGCTGT CTGGTAGCCT 180  
CCACTACTGC AAA 193

SEQ ID NO:2419

LENGTH:193

TYPE:nucleic acid

00901

2153480

TOPOLOGY: linear

CLONE:HUMGS02789

SEQUENCE DESCRIPTION:

GATCAAAACC CAGCAGAGTG CAAGCAGCAG TGAAGCAGGA TGTATGTGGA CTTGAGGATA 60  
ACCTGCACTG GTCTACCTTC TGCTTCCCTG GAAAGGATGA ATTTACATCA TTTGACAAGC 120  
CTATTTCAA GTTATTGTT GTTGTTGC TTGTTTTNT TTTGAGCT AAAATAAAA 180  
TTTCAAATAC AAA 193

SEQ ID NO:2420

LENGTH:192

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS02790

SEQUENCE DESCRIPTION:

GATCAGACCT CAATAATTT ATACTGTAAT AAGCTCTTG AATGTNTATA TTATTATTT 60  
TNACAATCAT TTCATTTGT ATTAATATC AATGGACTGA GTCTGATTCA GAAAATAATT 120  
GTAATGTTCA TATTCAATAT CTTACAGTGA TACAGTTTG TATTTACATA TAAATATACC 180  
GACATGACCA AA 192

SEQ ID NO:2421

LENGTH:276

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS02791

SEQUENCE DESCRIPTION:

GATCAGGGTT TCAAGAATGA CTGCAGTGGG TTTGGAAAC AGACTTATCA TTATTGATTT 60  
GAGGTTCCC AGAGATATAG TTCACAGTTA ATTGTTGCC TCTAATACAA CTGACCATTT 120  
AAAATTGAAAC AAGTTTATTG TTTGTAACA ATGTCAGTTG TTAAACCTTG NCATTCAAT 180  
TAAAACATGA NTTGAGTTA TAACTCANTG CAANTNCAAC AGTTGTATTG GGNGTTAANT 240  
TATTTTCACA CGTNNCTTN TTTCATGGAN NNCCCN 276

SEQ ID NO:2422

LENGTH:191

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS02792

SEQUENCE DESCRIPTION:

GATCTTTAT TTTCTCATTA TTTATAACTT CAGACTTGGG CCCCCGTTC TTTCTTCCC 60  
ATTAACCTGA GTGACCTGTG TGAGAGACAG ACAGATGCC CACGAGGATG GCTGGACAAG 120  
GACTTTACT TTTTATTACA TAAAAATATT AAAAATAAA TAAAAAAAT AAAATTTAA 180  
ACTAACTTAA A 191

SEQ ID NO:2423

LENGTH:189

TYPE:nucleic acid

00902

2153480

TOPOLOGY:linear

CLONE:HUMGS02793

SEQUENCE DESCRIPTION:

GATCGGAATG CGGGGTGAG AGCTGATGGG CGGCATTGGG AAAACCATGA TGCAGAGTGG 60  
CGGCACCTTT GGCACATTCA TGCCATTGG GATGGGCATC CGATGCTAAC CATGTTGCC 120  
AACTACATCT GTCCCTNCCC ATCAATCCCA GCCCATGTAC TAATAAAAGA AAGTCTTGA 180  
GTAGTCAAA 189

SEQ ID NO:2424

LENGTH:187

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02794

SEQUENCE DESCRIPTION:

GATCGAGACC ATCCTGGCTA AAACGCCTGG AATGCAGTGG CACAATCACT GCTCACTGCA 60  
GCCTTGACCG TNTGGACTCA AGTAATTCTC CTACTTCAAC CTCCCAAGTA GCTGGGACTA 120  
CAGTCATGCA CCATCATGCC TATAAAGATA ATTTAATTAA TAATAATNA TTTATACAAA 180  
CAATAAA 187

SEQ ID NO:2425

LENGTH:187

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02795

SEQUENCE DESCRIPTION:

GATCAATCGT GCATCCTNAG TGAACCTCTG TTGTCCCTCAA GCATGGCTN NNTACTTGTG 60  
AACTATGGTG TTCAGTTTG CCTCTGTTAG AAATTACACAC TGTTGTTGA ATNATGTGGA 120  
ACTCCTCTAA AANTTACAGT ATTGCTGTG AAGGTATCTA TACTAATAAA AAAGCATGTG 180  
TAGNAAA 187

SEQ ID NO:2426

LENGTH:185

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02796

SEQUENCE DESCRIPTION:

GATCNCCTTT TNAACCCGNT CCTGCCAC CTGCCCTATA GTTATGGCCT GTGTTCTGCT 60  
CTCCTGGTCC CAGTGCACCG TCTGCTCTGT GAACTCCTCC CACCAAGGCC TTCTTACCCC 120  
ACGCCTGTCT GTCCCNCTCG TTCTGTAGCG GGNGGTACAT AATAAAACAA TGGNGTGGNG 180  
ACAAA 185

SEQ ID NO:2427

LENGTH:181

TYPE:nucleic acid

TOPOLOGY:linear

00903

CLONE:HUMGS02797

## SEQUENCE DESCRIPTION:

GATCTATGTT TTCTGAAAAT AATTGGTTAA TGGAAGTTAT CTAATATATT TNAACTGTTC 60  
 CTGTTAAAAA CAATAGGCTT CAAGATGACA TAACACCAAA TCAAAATNA CCAAAGGAAT 120  
 CATTGGTTT GTTAGATTG TAATTTAGCA TCATTGGCAA TAAATCTACT CAAACGTTAA 180  
 A 181

SEQ ID NO:2428

LENGTH:180

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02798

## SEQUENCE DESCRIPTION:

GATCCCAAAG GGGTTGGAGG CAGGAAATAT TTGAAAATTC AGACTGGAAT TCCAGGCCAA 60  
 AAGCTCAAGA CCACCAGCCT CTCTCCTGC CTGGAAAAAT AAGCCTTGT GAAAGACTGA 120  
 TTTACCATGT ACAATTGTGA TTGTGACGT TGTTGAGTAA ACCTCCAGAC TTTCTCTAAA 180

SEQ ID NO:2429

LENGTH:186

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02799

## SEQUENCE DESCRIPTION:

GATCATAAGT NAAAAATGTA TTTAATATAC CTAACCTACC AAACATCATA GCTTAGCCTA 60  
 GCCTGCCTA AACATGCTA GAACACTTAC ATTAGCCTAC AGTGGGCAAA ACTATCCAAC 120  
 ACAAAATCTA TATTGTAATA AAGTTATAAA GANTTTGAA TAAAANTCA ATATTGANG 180  
 TACAAA 186

SEQ ID NO:2430

LENGTH:180

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02800

## SEQUENCE DESCRIPTION:

GATCTGGTGG AGGAACTGA AGATGAAGGC CTCTCAGGCA CCATGGATGG NATGGGTGTG 60  
 TGTAAGGGGG GCAGGGTCCC CAGGAGCTGC CCCAGGTCTG GCTNGACAGT TGCACGGNAA 120  
 GTCTGTTTG TAAACTCAAC GTTCCACGN CTTTCCATT AAACTTACC CCAAATCAAA 180

SEQ ID NO:2431

LENGTH:180

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02801

## SEQUENCE DESCRIPTION:

GATCTATTT TCCTAAAACA TTCCCCCTCCC CACTCCTCTC CCACAGAGTG CTNNNNNTGTT 60

CCAGGCCCTC CAGTGGGCTG ATGCTGGGAC CCTTAGGATG GGGCTCCAG CTCCCTTC 120  
 CTGTGAATNG AGGCAGAGAC CTCCAATAAA GTGCCTTCTG GGCTTTNCT AACCTTTAAA 180

SEQ ID NO:2432

LENGTH:179

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02802

SEQUENCE DESCRIPTION:

GATCTTCACC AATGGCAAGT GGAATGACAG GGCTTGTGGA GAAAAGCNNN TTGTGGTCTG 60  
 CGAGTTCTGA GCCAACCTGGG GTGGGTGGGG CAGTGCTTGG CCCAGGAGTT TGGCCAGAAG 120  
 TCAAGGCTTA GACCCTCATG CTGCCAATAT CCTAATAAAA AGGTGACCAT CTGTGCAAA 179

SEQ ID NO:2433

LENGTH:273

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02803

SEQUENCE DESCRIPTION:

GATCTAAAAA TTCAATGCAA ATATCTTTA TTTGGTAGTT TTGTCTACAT ATTNATGCT 60  
 CTAGCATGTG CAATATATCT TTGTAAAGCA CGATGATACA AATCTGGTGC CAGTGTATA 120  
 TTTNGCATAA CATATTGTA ACAGCATAAA ATATTGTTTG ATGATTTCAG TGGGATTTG 180  
 TCTATAATGT TTTCTTATGT AAATNGGAGT TGAATGACTC TGGTAAATGT CATGACTGTA 240  
 AAANTGGGGA AANTGACTTT NAGTTCACTG AAN 273

SEQ ID NO:2434

LENGTH:178

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02804

SEQUENCE DESCRIPTION:

GATCCAAACT AATTTACAT TTAAAAAAAAA AGTTAAACTA AACTCTTTA CTGCTGATAT 60  
 GTTCCCTGTA TTCTAGAAAAA ATTTTNACAC TTTCACATTA TTTTGTA CA CTTCCCCAT 120  
 GTTAAGGGAT GATGGCTTTT ATAAATNTGT ATTCAATTAAA TGTTACTTTA AAAATAAA 178

SEQ ID NO:2435

LENGTH:176

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02805

SEQUENCE DESCRIPTION:

GATCTAAAAT AAATATTGTT AAAAGCATTA CCTCTAGGGA ATGGGATT TA GATTTAAAAA 60  
 GGGTGGGATG GGAAACTGTG TTTTCATTT TAAGTCCTTC TGTACTANNT AATTTGTNAC 120  
 CTTGTGCATG TATTACTTTG AAAAATTTT TAATAAACCC AAATAAAANT CTTAAA 176

2153480

SEQ ID NO:2436

LENGTH:175

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02806

SEQUENCE DESCRIPTION:

GATCANCCT CAAGGGCACA TGCCAAGGGC AGAGCAGCCC ATNTAGACAG CTTCGNAGGG 60  
CATGGGGGTG TAGGGAGTTC GGGGTAGCTC CTCATTAACT ATTTGTNGGN TGAGTAAAGG 120  
GGTGAGGCTC AGTGGCAGGT ACCTCTNCAA TNACAAGCTG CCNCCCCCTCT ATGTN 175

SEQ ID NO:2437

LENGTH:175

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02807

SEQUENCE DESCRIPTION:

GATCGGCAGC AAGAGTAAAG ACACAGCTCC AGAGGCCAC ACTGTGGGT CTGGGCCCTG 60  
CCTTAGGCAG CCCCCCTCTT TGGCCCCCTC CTGTCAGGCC CAGGGCTTGG AGTGAAGTN 120  
ACTCTCAGGT GGTGGGTGG GGAATGTGAA TAAACATGAT TTCTTGCCGG GCAAA 175

SEQ ID NO:2438

LENGTH:174

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02808

SEQUENCE DESCRIPTION:

GATCCCTCA CTGGCCCCCT CGGGAGNCCT GGGTTGGACT CAGGGNCTCC NCCAGCTGGG 60  
GNGGNGGACC GCAGCACCTA TCTGAGCAGT TAGAGCGTCT TTTTTTCAG ATTGTGTACA 120  
GTAGATTATT TATTTGTNA TTTTGAATA AAATTTATTT TATGGCTTAG GAAA 174

SEQ ID NO:2439

LENGTH:172

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02809

SEQUENCE DESCRIPTION:

GATCTTGCTCT GAAATGCTAG TTTCTGACTA CAAAAACTAC AGGACATAGT AGATATGCTC 60  
ACTAGAGCTG CTTAAAATAA TTCCCTTTT TTTCTGTTG AATTCTGTTA CAAAACCAGG 120  
TCTGTGTTAT AATAGAAANC ACACTTATGA ATAAAAATCT TAAATTA AA 172

SEQ ID NO:2440

LENGTH:171

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02810

00906

2153480

SEQUENCE DESCRIPTION:

GATCAATGTC CCTGGTTACC TATGTGTTG AATTATCTTC GTGTTACAGG TGTTAATGA 60  
TTTNCTCCT TCTAGCTTAT TTGTATTCA CCTGTTTTC TTTAAATNAA CATGGTTACA 120  
CTNTGTTCA GCAACTGTAT AAATTAAACA CAGATNATTA CTACTGCTAA A 171

SEQ ID NO:2441

LENGTH:170

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02811

SEQUENCE DESCRIPTION:

GATCGTAAAA TTTTAAGCAC TAAAAATTTC TTCATAACCT TTCATAATAA AGTTAATAA 60  
TAGGTTTATT AACTGAATTTC CATTAGTTT TAAAAGTGT TTTGGTTG TGTATATATA 120  
CATATACAAA TACAAACATT ACAATAAAATA AAATACTTGA AATTCTCAAA 170

SEQ ID NO:2442

LENGTH:196

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02812

SEQUENCE DESCRIPTION:

GATCTACTTT GAATCCACA CTCTCATTAA TAAATTGANT AAAAGGGAAT ATTTGGCAC 60  
CTGATATAAT CTGCCAGGCT ATGTGACAGT AGGAAGGAAT GGTTCCCT AACANGCCA 120  
ATGCACTGGT CTGACTTTAT AAATNATTAA ATAAAATGAA CTATTATCAA ATAAAACGTA 180  
TGATTCACTC CTTAAA 196

SEQ ID NO:2443

LENGTH:216

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02813

SEQUENCE DESCRIPTION:

GATCAAATTTC TTTCTGCA ATNATGTGAT GAGTTGCCAA ATAATTGANA TTATTTAAA 60  
ATGTTTGTGTT CATATTCTTG TTTTATAATT AAAATTACA TTCAGTGTGT ATGGGTTTT 120  
TTTNATTTC NACTCTTAAT GTAAGGTGGA TATTNCTGTN ATTTACATG GTTTCTTACT 180  
GAGATTTAT ATATAANTNA TAAAANGTTT ACCAAA 216

SEQ ID NO:2444

LENGTH:173

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02814

SEQUENCE DESCRIPTION:

GATCGTTAAC GCCCTTGAAAG TGGTTTTGT GGGTGTGAAC AAATGGTGAG AATTGAATT 60  
GGTCCCTCCT ATNATAGTAT TGAAATAAG TCTACTTAAT TTATCAAGTC ATGTTCATGC 120

00907

CCTGATTTA TATACTTGTATCTATCAATA AACATTGTGA TACTTGATGT AAA 173

SEQ ID NO:2445

LENGTH:223

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02815

SEQUENCE DESCRIPTION:

GATCAGCTCC GTGGGGCTGG TTTGGTCCA CAGCATAACA GGCAC TGCCCT CCTTACCTGT 60  
 GAGGAATGCA AAATAAAGCA TGGATTAAGT GAGAAGGGAG ACTCTCAGCC TTCAGCTTCC 120  
 TAAATTCTGT GTCTGTGACT TTCAAGTTT TTTAACCTC TGAATTGTAA CACATTAAA 180  
 ATTCAGTG TACTTAAAAA TAAAATACCTT CTAATGGAAC AAA 223

SEQ ID NO:2446

LENGTH:168

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02816

SEQUENCE DESCRIPTION:

GATCTGTAC TTTGTATAAA ACAAGAAC GATTAGTTCA TTAAACTTT TCTTACCTT 60  
 CTGGTAGTAA AAATAGATAA AATAATTCCG TNTCAACTAC TGTGTGAAA AAGCCTGTAT 120  
 CATATGTAAC TGGGACTTTT GTAAATAAT NTTTTGCGC TCTGCAA 168

SEQ ID NO:2447

LENGTH:168

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02817

SEQUENCE DESCRIPTION:

GATCATAAAA TGTATCTTT CCATGGCCAA CAAGGNGCAT CTNTTATAAA TGCATAATAA 60  
 CCCAGTTNGT ATCAAAGGGT ATCGACTTAA GTGAAATTTC AACATGCTGT TACTTTTCC 120  
 TTTAATGTA ATNCTGTTT CCAAATAAT GGGGGAGACA AATGGAAA 168

SEQ ID NO:2448

LENGTH:135

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02818

SEQUENCE DESCRIPTION:

GATCTGTGCA ATAAAGTGT TGCAGTCTTA TTATTCTCTA AGAAATTCT TATGGACGTC 60  
 ATAATTGTTG TATATTGAAC AAAATATTCA TACTTATGCA GTTGCATAAC ATTGAAATAA 120  
 AAATTTAGCA TGAAA 135

SEQ ID NO:2449

LENGTH:167

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02819

SEQUENCE DESCRIPTION:

GATCCTGCCA GAAAATTCA AAGACAGTAG ATTGAAAAGG AAAGGCTTGG TAAAAAAAGGT 60  
TCAGGCATTC CTAGCCGAGT GTGACACAGT GGAGCAGAAC ATCTGCCAGG AGACTGNGCG 120  
GCTGCAGTCT ACAAACTTG CCCTGGCCGA GTGAGGTGTA GCAGCAN 167

SEQ ID NO:2450

LENGTH:167

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02820

SEQUENCE DESCRIPTION:

GATCAGNAGG CATCACTGAG GCCAGGAGCT CTGCCCATGA ACCTGTATCC CACGTACTCC 60  
AACTTCCATT CCTCGCCCTG CCCCCGGAGC CGAGTCCTGT ATCAGCCCTT TATCCTCAC 120  
CGCTTTCTA CAATGGCATT CAATAAAGTG CACGTGTTTC TGGTAAA 167

SEQ ID NO:2451

LENGTH:413

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02821

SEQUENCE DESCRIPTION:

GATCCGGTTT CTTTTGCTC GCCCCTGTTT TTTGTAGAAT CTCTTCATGC TTGACATACC 60  
TACCACTATT ATTCCCGACG ACACATATAAC ATATGAGAAT ATACCTTATT TATTTTG TG 120  
TAGGTGTCTG CCTTCACAAA TGTCAATTGTC TACTCCTAGA AGAACCAAAT ACCTCAATTT 180  
TTGTTTTGGA GTACTGTACT ATCCTGTAAA TATATCTAA GCAGGTTTGT TTTCAAGCACT 240  
GATGGAAAAT ACCAGTGTG GGTTTTTTT TAGTTGCCAA CAGTTGTATG TTTGCTGATT 300  
ATTTATGACC TGAAATAATA TATTTNGTNC TTCTAAGANG ACATTTGTT ACATAAGGG 360  
ATGGCCTTTT TTATACAANG GGAATAANAT TNTGGCATT TCCTATGGAA AAA 413

SEQ ID NO:2452

LENGTH:166

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02822

SEQUENCE DESCRIPTION:

GATCTGTNAT TGGCATCTTG GTTCTACCTT TTATCAGATG TTGTTGCCCT GTGCAAATNA 60  
CATTTCTCT GAGTCTCCAT TTTCTCATTT ATAACATGCG GAGAATAATA CTTATATTG 120  
TGGTAGTAGT GTGAACATTA AAAAGATAAT GTATGTGAAG TACAAA 166

SEQ ID NO:2453

LENGTH:165

TYPE:nucleic acid

00909

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TOPOLOGY:linear

CLONE:HUMGS02823

SEQUENCE DESCRIPTION:

GATCCATGCT AATATTGTAT TTTTNTAA AACATAGCTT TCCTGTAATT TAAAGTGCTT 60  
TTATGAAAAT ATTTGTAATT AATTATATAT AGTTGAAAT AGCAGTAAGC TTTCCCATT 120  
TAATATATT TGNTATACAA ATAAAATTG AACTGAAGTC TGAAA 165

SEQ ID NO:2454

LENGTH:164

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02824

SEQUENCE DESCRIPTION:

GATCTTGTAA GAAGGCAGTA GGTCTGGGT GGGCCTGAG ATTCTGCATT TCTAACCAAGG 60  
TCCTGGGAGA TGCTGATGCT ATCGAGCCAC AACACACTT TGAGTAGCAA GCCTCTGGCC 120  
TATCCTTANN NNTTGTAAATA TTAAAATGCT GCCTCTCAGT CAAA 164

SEQ ID NO:2455

LENGTH:164

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02825

SEQUENCE DESCRIPTION:

GATCAATGCC AGATTTNTT NTTGGGTAA GTTAGCTGAA GTCATTTAAA GATGGAAAGG 60  
TGGGAAAATN CTTTGATATT TGATGTCATT GTATCCACAT TTNTTGTAAAG ACATATTGCA 120  
TACCANTTAT AATNATATCA ATAAAGTTG ATAAAAGCTT CAAA 164

SEQ ID NO:2456

LENGTH:164

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02826

SEQUENCE DESCRIPTION:

GATCCCTCT GCCCTGGCAG AATGGCAGGG GTAATCTNAG CCTTCTNCAN TCCTTTACCC 60  
TAGCTGACCC CTTCACCTCT CCCCTCCCT TTNCCTTTGT NTTGGGATTC AGAAAAGTGC 120  
TTGTAAGAGA CTGTTATNT TTAATNAAAA ATATAAGGCT TAAA 164

SEQ ID NO:2457

LENGTH:162

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02827

SEQUENCE DESCRIPTION:

GATCCAGAAT ATTTCATTT AAAGCTAAC CATTATTGG AACATGGTA AACATGTAC 60  
ACATTGTAAA AGTAGGAAAC AGTACAAAG AATGGAATCA AATACTATAT TATGTGAATA 120

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ANCTAGAGTG ATTTGGAAT TTCACTCTCT TCACCCCTTA AA

162

SEQ ID NO:2458

LENGTH:161

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02828

SEQUENCE DESCRIPTION:

GATCAAAAC CTCTATAGTA GCCACTAGGG CAAAAACTGT GTGTATGTGT GTGTGTAAGT 60  
GTGTGTACAC TGTCAATAT GGTCAATAA GGTACCAATA GCCACATGTG ACTATTTAAA 120  
TTCATTGCAA TGNAATAAA TAAAGGTAT ACTAGCTCAA A 161

SEQ ID NO:2459

LENGTH:159

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02829

SEQUENCE DESCRIPTION:

GATCTTCACC TCTCTGCCTC CCTACTGCC CAACATAGCC TTGAGGAGGN TTCTCAGCCA 60  
CCAAAGGGTT CTGGCCCCTT CTCACTCTCC TCTCCTCTCA GATGGAACTC TGGTTATAAT 120  
GGTGTAGTT ATCGAATAAA AACGACTTCA GAATGCAAA 159

SEQ ID NO:2460

LENGTH:159

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02830

SEQUENCE DESCRIPTION:

GATCAATTAA AAATATTNA TTTCTAAAAA GCCTTTTG CCTGTTGAA TGTGCAGGAC 60  
CCTTCTCCCTT TCATGGAGA GACAGGTAGT TACCTGAATA TAGGTTAAA AGGTTATGTA 120  
AAAAGAAATT ATAATAAAAG GGATACTTTG CTTTCAAA 159

SEQ ID NO:2461

LENGTH:158

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02831

SEQUENCE DESCRIPTION:

GATCTATTTA ATTGAGGTT GATGTTCTAT CCAATGGCCG AAGATAGCAG CAGGTTTTT 60  
TTTCATATG TTGATTGTT TCATTGGAT TTTTTTTA TNATNCTTNA TTGTCTTTT 120  
TTTNCCCCAT CCCTGTCTTG NGATTCNCNG GCATGTTN 158

SEQ ID NO:2462

LENGTH:256

TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS02832

SEQUENCE DESCRIPTION:

GATCTGAAAT GTGATGATTA TTGGAATGCA TAAACATTGA CGTATTTGG AATGTATTAA 60  
AACTGAAAATG GATAAAAATT AGTATATATG TTTATTTGT TCTATCTCCT TTGGTTGTAT 120  
TTTCCTCTGC AGTATTAAC ATTTGGAAGA GACTAAAGGT ATGCAAANT AATGTCTTAT 180  
TTTCATTATG TGTGCTTCCA TTTGACACAT GGGAAATTAG ATTAATTCA CTATTAANTA 240  
GNACTTTATA CAGAAA 256

SEQ ID NO:2463

LENGTH:156

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02833

SEQUENCE DESCRIPTION:

GATCTTGTTGCT ACTACTCTAGG ACTGGGCCCG AGGGTGGTTT ACCTGCACCG TTGACTCAGT 60  
ATAGTTAAA AATCTGCCAC CTGCACAGGT ATTTTGAAA GCAAAATAAG GTTTCTTTT 120  
TTCCCCTTTC TTGTAATAAA TGATAAAATT CCGAAA 156

SEQ ID NO:2464

LENGTH:156

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02834

SEQUENCE DESCRIPTION:

GATCTTCTCC TTGTGAAGC ATCCCTCACC ACTACTACTG TGATGGGTG 60  
TCTGTTTTC CACAGCATCT ATGCTTCTNT NCACTGTATC ATTTATCAA TTGATNNTTN 120  
CTGCGTCTG TAAAAAACAN NGAGTACCTT AAGAAA 156

SEQ ID NO:2465

LENGTH:191

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02835

SEQUENCE DESCRIPTION:

GATCTGCATT TATCATGAGT TCCTTTTTT TTTAAACTTT ATTTTGGGA AAGTAACACA 60  
TGANGTAGTT CAGTCATGTC AGGTTTGCT GGGGTGGANT GGACCGAGTC 120  
AGTTTTTTT TAGNGATGAA AAGCTTGTGA NCNCCTGTAA ANCAGTGTGN ATTTGAAATN 180  
CATCTGTTNA N 191

SEQ ID NO:2466

LENGTH:155

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02836

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SEQUENCE DESCRIPTION:

GATCCACCCC CTGCCACAA AAAATTGCTC CTAACTCCAC CGCCTATCCC AAACCTACAA 60  
GAACTAATGA TAATCCCACC ACCCTTTGCT GACTTTTT GGACTCAGCC CACCTGCACC 120  
CAGGTGATTA AAAAGCTTAA TTGTTCACAC ANAAA 155

SEQ ID NO:2467

LENGTH:154

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02837

SEQUENCE DESCRIPTION:

GATCCTAGCA AATTGCCCC ACCANCTTA CTAAGGGGG AGGAAGGGAG GGCAAAGGGA 60  
TGAGAAGACA AGTTTCCCAG AAGTGCCTGG TTCTTTTAC TTTCCCTTT GTTGTGTTN 120  
TTGTAGTTAA AGGAATTAA TTTTAAAAAA GAAA 154

SEQ ID NO:2468

LENGTH:154

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02838

SEQUENCE DESCRIPTION:

GATCGGGCT AGCCCCGAA CACTAATGT A GAAACCTTT TTTTACAGAG CCTAATTAAT 60  
AACTTAATGA CTGTNTACAT AGCAATGTGT GTGTATGTAT ATGTCTGTGA GCTATTAATG 120  
TTATTAATT TCATAAAAGC TGGAAAGCAG CAAA 154

SEQ ID NO:2469

LENGTH:153

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02839

SEQUENCE DESCRIPTION:

GATCACCCGG GGCTGCTGTC ATACAGACTT CTCAGGGAG TTCTCAGCTT GGACCTTAT 60  
CTCCCCAGAA TCCTGGAACC TGCTCCTCT GCTCTGTGA CTGACTGTGT TCTCTATGCA 120  
ACTTCCAATA AACCTCTTC ATTGAAAGG AAA 153

SEQ ID NO:2470

LENGTH:154

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02840

SEQUENCE DESCRIPTION:

GATCTTAAGC CCAGCTCTGT TCTGCCCGG CTTTCTCTG TTTGATACTA TAAATTTCT 60  
GGTTCCCTTG GATTTAGGGA TAGTGTCCCT CTCCATGTCC AGGAAACTTG TAACCACCC 120  
TTTCTAACAG CAATAAAGAG GTGTNCTTGT CAAA 154

00913

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SEQ ID NO:2471

LENGTH:152

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02843

SEQUENCE DESCRIPTION:

GATCACAGGC CTTGCTTTG TAACAATGAT GACCCGGCC TGTCTCATAT TCTGAAGAGG 60  
AAAAGTCAAA GTGTTGCTGN GGCTCCATAT TTCAACTAAA AATATATCTG TTGGAGAAAG 120  
AAATTAACAA TAAAGAATT TCATAGGTTA AA 152

SEQ ID NO:2472

LENGTH:151

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02844

SEQUENCE DESCRIPTION:

GATCGTATTG CCTGCTTAA GGAACGTGNTA GNCTTGTTG GGTGATGAGA CAAAGTTCTT 60  
GAGACATTAA AACTGTATT ACCAGTGTGA AAAATGTAT TTATGGAGAT TAATTCACTTA 120  
TGGAAATAAA ACATTGCCTA AGCCCTTGAA A 151

SEQ ID NO:2473

LENGTH:150

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02845

SEQUENCE DESCRIPTION:

GATCCAATCA GCTGTAAGTN TTAACCACAG GGCTGAGGCT CCCTCCAAGT ACCCACTGGG 60  
AACAGCAGCT TCAACCTGAG CCCTGNGTCC CAGCCAGCCC CCACAATCAC CTATGCCAT 120  
TCTTCAGAAT ACATTGGATG CATGTGCAA 150

SEQ ID NO:2474

LENGTH:149

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02846

SEQUENCE DESCRIPTION:

GATCCAGAGA GTCTGAAGAC ATTCTNATG CCTTTATATA TTGGAGAACCTTCCCCATT 60  
TTNATATCCT TTCTCAAAA ATCTAAATNA TGTGCCTAAA AATAAGACAT GGCATAATAA 120  
GGTATAATTA AAGAGATAAT AGAATGAAA 149

SEQ ID NO:2475

LENGTH:153

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02847

00914

2153480

SEQUENCE DESCRIPTION:

GATCCAGTAC CTGAAAGATT TGATAGAAGA GGTCCGCAAG GCAAGGGGGA AGAAAAGGGT 60  
CCCCTAGTTG AGGATAGTCA GGAGCGTCAA TGTGCTTGT CATAGAGTGC TGTAGCTGTG 120  
TGTTCCAATA AATTATTTG TAGGGAAAGT AAA 153

SEQ ID NO:2476

LENGTH:147

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02848

SEQUENCE DESCRIPTION:

GATCCTTTG GAGTCAGACA GATGTGGTTG CATCTTAAC CCATGTCCT GAGCATTAGA 60  
TTTCTCATTT GCCAATAATA ATACCTCCCT TAGAAGTTG TTGTGAGGAT TAAATAATGT 120  
AAATAAAGAA CTAGCATAAC ACTCAA 147

SEQ ID NO:2477

LENGTH:207

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02849

SEQUENCE DESCRIPTION:

GATCTCCAGT GATTGGCGAT TTGACCTGGT TTCTNCCTGG ACTATTTGAA TGGGTGGATT 60  
TGTTGGTGCA TCTCTGTCT TCTTCCCTT TCCATTCTCC TNTATTNTTN TATTACATA 120  
CTTGTATGCA ACTNTGTAAT CTGATTNCCC CATGTAACAT TNTAATTGA NGGGTGGTCT 180  
GCGTGTNCAC TGGAAAACAT ATNTATN 207

SEQ ID NO:2478

LENGTH:146

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02850

SEQUENCE DESCRIPTION:

GATCGAGCTC ACAGGGGGCA CCCATCCTGN TAGTCAACAG AGTCTGAAGC AGTCAGGGTG 60  
TTGGATTCT CTGTTGTTGT CATCAATTCC TGCTGAGGGG TTTCTGGGT TTTGTTTTA 120  
ATAAAATAACT CCTTTGTAGC CTTAAA 146

SEQ ID NO:2479

LENGTH:144

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02851

SEQUENCE DESCRIPTION:

GATCCGGGCC AGCCAGGTGA CCCCCACGCT CTGGATGTCT CTGCTCTGTT CCTTCCCCGA 60  
GCCCTGCCCG CGGCTCCCCG CCAAAGCACC CCTGCCACT CGGGCTTCAT CCTGCACAAT 120  
AAACTCCGGA AGCAAGTCAG TAAA 144

00915

2153480

SEQ ID NO:2480

LENGTH:143

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02852

SEQUENCE DESCRIPTION:

GATCCAGGCA AATTCACTGTT CTTCTTTGT AACTCACTT CTTCGTCAAC ATTTCTGTGA 60  
CTCAATGGAT AGCATATTTC CATCAAGTAG CACGTATAAC GTGATGCTT CATGTTCTG 120  
CCTTAATAA AATAACCCTC AAA 143

SEQ ID NO:2481

LENGTH:290

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02853

SEQUENCE DESCRIPTION:

GATCTCTTG ACTGCTGTAG TACTAAAGTG TACTTAATGT TACTANGTN AATGCCTGGC 60  
CATTTCCAT TTATATATAT TTTTAAGAG GCTAGAGTGC TTTTAGCCTT TTTAAAAAAC 120  
TCCATTATAA TTACATTGT ACCATGATA CTAAATCAG AAGCTTAGCC TTGAAATTGT 180  
GAACTCTGG AAATGTTATT AGTGAAGTTC GCAACTAAAC TAAACCTGTA AAATTATGAT 240  
GATTGTATTG AAAAGNTAA TGAAAANTAN ACATTTCTGT CCCCCCTGAAA 290

SEQ ID NO:2482

LENGTH:143

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02854

SEQUENCE DESCRIPTION:

GATCTGATTG AGATGTACAT AGTTTTTTT TTTACCATAA CTGAATTATT TNATCTCTTA 60  
TGTTAACATG AGAAATGTAT GCCAAATNAT TAGTTGATGT ATGTTTTNA ATTTAATATT 120  
TAAATAAAAT ATTTGGAAGG AAA 143

SEQ ID NO:2483

LENGTH:269

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02855

SEQUENCE DESCRIPTION:

GATCCTTATC AGGGAGAGCA GGAATCCTTA TTCCCGGTGT CGCTAGTACT CATCTCTGCC 60  
GCCTCCTGTC TGCCCCCAGG CTGCTGCTNC TGCTGCCCTG TGGGTTGTGC CAAGTGTGCC 120  
CAGGGCTGCA TCTGCAAAGG GGCGTCGGAC AAGTGCAGCT GCTGCGCTG ATGCTGGAC 180  
AGCNCGCTCC NAGATGTAAA GAACGCGACT TCCACAAACC TGGNNNTNN TATGANCAAC 240  
CCTGACNGTN ACCGTTGCGN ATATTNCNN 269

00916

2153480

SEQ ID NO:2484

LENGTH:140

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02856

SEQUENCE DESCRIPTION:

GATCATACAT TTTATATGGT TGGGACTTCT CTCTTCGGGA GATGATATCT TGTTAAGGA 60  
GACCTCTTT CAGTCATCA AGTCATCAG ATATTTGAGT GCCCACTCTG TGCCCAAATA 120  
AATATGAGCT GGGGATTAAA 140

SEQ ID NO:2485

LENGTH:139

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02857

SEQUENCE DESCRIPTION:

GATCCAACCC CACCCCTCCTG GGTGCAGGCCA GAGGCAAGGC AGTCGCCCCA GCTCCTGAAT 60  
CCCAAGAACATG GTTCTGGCAA GTACTGCTGT TTGTTTGAG GGGCAAAGAG TTAAAATAAA 120  
ACGAGGTTCT GCCATGAAA 139

SEQ ID NO:2486

LENGTH:139

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02858

SEQUENCE DESCRIPTION:

GATCTGCCCG CTCCCCTCCA GCCTGTGTGG AAAGGAGGCC CACGGGCCT AGGGANNCNG 60  
AATTCTACAA TCCCGCTGGG GCGGCCGGGT CGGGAGAGAA AGGTGGTGCT NCAGTNGTGN 120  
CCCTGGGGGG TCATTCGAN 139

SEQ ID NO:2487

LENGTH:138

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02859

SEQUENCE DESCRIPTION:

GATCTTCAAT GCCTCTGAGT CATTGTTATA AAAATCAGT TATCACTATA CCATGCTATA 60  
GGAGACTGGG CAAACCTGT ACAATGACAA CCCTGGAAGT TGCTTTTTT AAAAAAATAA 120  
TAAATTCCTT AAATCAA 138

SEQ ID NO:2488

LENGTH:231

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02860

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SEQUENCE DESCRIPTION:

GATCATGGTT CTCTTGTAC GATA GTTGGG CATCTGTATT TCCACTTG TGAA TTTGCC 60  
TTTAAATTT GGTTATGGGT TTCACCTTT AAAATAATCA AACATATT TA TCTTTCTG 120  
TGTGATAGGT TTTTNCTGT ATCTTTCC GTTAAACACA CAGACCCCTC CCCAATCTGG 180  
ACATTGAATA CNTATTCATT TTCCCTTGNC NNAATANNCC NNANACANAC N 231

SEQ ID NO:2489

LENGTH:137

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02861

SEQUENCE DESCRIPTION:

GATCTGCCCG TGCATGGTAG CTGCTTAAC GGAGCACTTC TCCTTTCC AAAGGTCTAC 60  
ATTCTAGGGT GTGGGCTGAG TTCTTCTGTA AAGAGATGAA CGCAATGCCA ATAAAATTGA 120  
ACAAGAACAA TGATAAA 137

SEQ ID NO:2490

LENGTH:135

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02862

SEQUENCE DESCRIPTION:

GATCTTTAA TTTTGAGACA GTATAAGGAA AATCTGGTG GTGTCTTACA AGTGAGCTGA 60  
CACCAATT TTCTGTGT ATTAGAATG AAGTCTGAA AAAAACTTTA TAAAGACATC 120  
TTAACATCATT CCAA 135

SEQ ID NO:2491

LENGTH:286

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02863

SEQUENCE DESCRIPTION:

GATCCAATA TTTCAAGCC ATGAAATCCA TTGGTTTGT GGGCAGTTA ATAAACCTGA 60  
ACCTTGTGT GTTTCTAAT TGACCTGAG TTGACCATCC TTCTTTTA NAGTATATT 120  
CTNGTATGAT ATTNTGTAAA GCTCTCACCT GTTCTTTA TGGGGACTTT TCGTTTTGG 180  
GCAACTGCAG TGTATTATG TGAANTTA TANGAGAATT ANTTTTCCA TGTGCATATT 240  
AATATGGTNC CTCCACACAT GNNAAGGGCA CAGTGGCTTC GTGTTN 286

SEQ ID NO:2492

LENGTH:135

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02864

SEQUENCE DESCRIPTION:

GATCATGCCT CTTCCAACA CGTGTTCACA ATCTCAAAG GGACTGTATT TNTNCTGT 60

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GCTTAATNTG ATTGAAATA TGTTGAATCA AAGTGAATAA TTTATNTTTT GAATAAAGGA 120  
GATAATAGCC TTAAA 135

SEQ ID NO:2493

LENGTH:135

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02865

SEQUENCE DESCRIPTION:

GATCGAAAAC AAACGNTAGA TAATNCCCAA GGAGCTTACC AAGAGGCATT TNATATAAGC 60  
AAGAAAGAGA TGCAACCCAC ACACCCAATC CGCCTGGGN TTGCTCTAA CTTCCNGTA 120  
TTTNACTATG AGATN 135

SEQ ID NO:2494

LENGTH:135

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02866

SEQUENCE DESCRIPTION:

GATCATGCCA CTNCACTCAC ACTGACACTG CCTCGGACAA CAGAGCAANA CTNCATCTCA 60  
AAAACAAACA AAAAAAATCA CAGNCTCATT TTAAAGGAGC AGCAACCNA CCAAATACAA 120  
NCTTCATTTG ACAAN 135

SEQ ID NO:2495

LENGTH:134

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02867

SEQUENCE DESCRIPTION:

GATCATTAAC ATGCCAGGGC AGTTCCCACT GATTTAGATG GTCCAAGATA ATCTCATTCA 60  
GGAGGGCTTGA AACATTAATG GTTTAGTCTT GTGAATTAA ACAGTTCTCT GTCATCGTTT 120  
AACAAAACCA ACAN 134

SEQ ID NO:2496

LENGTH:134

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02868

SEQUENCE DESCRIPTION:

GATCATGCCA CTGGACTCTG TGCTGAGCAA CAGAGTTAGA CCCTGTCTCT AAATAAATAA 60  
ATAAAACAAAT AAACAGTAAA AAAATGTATA GTTCAATCCT TATCTGTATT AAACCTCCTT 120  
TAACTTGTT GAAA 134

SEQ ID NO:2497

LENGTH:133

00919

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TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02869

SEQUENCE DESCRIPTION:

GATCACATGT GGGCCCGTGT CTGGCCGCCG CCGCCCNGCC CCGTCCCTGC GGNACACCACC 60  
TAATTTATTG CGGTGCGTCC TGCTGCTGTG ACTGCTTTG TACCTTGCA ATAAAGAATT 120  
TTCTGGTTTC AAA 133

SEQ ID NO:2498

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02870

SEQUENCE DESCRIPTION:

GATCCTGGAC ATATTTATA TTTATACCAA ATATTTATA TATTTNCTAC TGTTGTCAAT 60  
GGTAGTGGTT TTTAAATTTT CAAACATTCA TTACTAGTAT ATAGAAATAN AATCACTTT 120  
AAAAAATGTA AA 132

SEQ ID NO:2499

LENGTH:131

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02872

SEQUENCE DESCRIPTION:

GATCCTGTTT TTTCTTAACA AGTGAGGCG TGGGTAGAGC AGGAATTGGT TTTCCAGCAT 60  
TGTGTCCGTA AACCTGAGTT AGAATAAGAT GTAACGGAAG CCACGATAAA GACTCGGTCA 120  
AATCCTGCAA A 131

SEQ ID NO:2500

LENGTH:133

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02873

SEQUENCE DESCRIPTION:

GATCCTGGAT GGAACCTGGCT TCTTTATCGA GAAGAATATA ATTCTCCATG AGGACTTAAT 60  
GAATCCAAAC CTGTGTCAAT CCTGGTTGC ATACCCAATT AAACACTNGA AATAAAAATT 120  
NTTNGGGTNN AAA 133

SEQ ID NO:2501

LENGTH:130

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02874

SEQUENCE DESCRIPTION:

GATCTCTGCT CTTTGTCAAGA GATTGCAAA GACTCACGTT TTTNTTGTTC TCTCATCATT 60

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CCATTGTGAT ACTAAGAAC TAAGAAGCTT AATGAAAAGA AATAAAATGC CTATGTTGTT 120  
GTTCTAGAAA 130

SEQ ID NO:2502

LENGTH:130

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02875

SEQUENCE DESCRIPTION:

GATCAAAAAA GGCAGATGNA ANTACTTAAN ACTCAGTGTT TTGGAGAGAT TTCCCTTNAG 60  
TTTGTGTT GGCTGGTTG AACGATAGAA ATATGCAGCA TGCAATATAT GCTTATATTT 120  
NATTNAATN 130

SEQ ID NO:2503

LENGTH:129

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02876

SEQUENCE DESCRIPTION:

GATCCCCCAC CTGGCAGAGG ACCCAAGTACA AAATAGGCAC TCAATAGATG TTACACCAAC 60  
TTTGAAGGG CAAACATATT TCTTAATGAG AGGCAGTCCT TCATGTTTN CAATAAAATG 120  
ACTTTAAA 129

SEQ ID NO:2504

LENGTH:129

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02877

SEQUENCE DESCRIPTION:

GATCTTCTCC GAGGCCACC GAAGGTACTG AAGAGCCTCA CCTGGGGCA TTTTGTGGGT 60  
GGAGGGCCAG AGTGTGTATA CCCAGGCTTG TCTGGAAGGA GAAGGCCTT GCTGCCTGAA 120  
AGTCTCAA 129

SEQ ID NO:2505

LENGTH:129

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02878

SEQUENCE DESCRIPTION:

GATCTAAATA AGTGTTCAA GGAAAGTTT CCTAAGAAA TGTAATATTA CCTCATTGG 60  
GCATCATTAC TCTGTTAATT CTATATCAA GGAAATAAAC TTGCTACTTG CACTAAATGA 120  
AAAAACAAA 129

SEQ ID NO:2506

LENGTH:128

00921

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02879

SEQUENCE DESCRIPTION:

GATCGTCCCC CGGGCGCCG GCCCTGNAG GGGCTCACCT GGATGGGCC TGCAGTGCCT 60  
TCCCCTTTG CTTCCTTCCC TGACGGCCC GCTCCNGAA ACGCGCGCAA TAAAGTGATT 120  
CGCAGAAA 128

SEQ ID NO:2507

LENGTH:127

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02880

SEQUENCE DESCRIPTION:

GATCACTT GTGGTTTGG GGGATGGCAT TATAAGAGAG GAGACTGGAN ACAGGGGGC 60  
TATTGTNATG CAGATTGTT GGATGTCCAC CCAGCATTCA CTTTNCCAT CTTTGCCAG 120  
GGGNNNN 127

SEQ ID NO:2508

LENGTH:128

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02881

SEQUENCE DESCRIPTION:

GATCCCACGC AGCGCTGAAC CGAACCGAGT AGGAAGCCTT TCTCCCCANG GCACGTGGCT 60  
TCAGGGCGTT TCCCATTGAC CAAGTTGAC CCTGNTTTGA ATAAAGAGAA GTGCGTTGG 120  
ATTAGAAA 128

SEQ ID NO:2509

LENGTH:129

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02882

SEQUENCE DESCRIPTION:

GATCGAGCTT CTCCCTTGAG TTCTAACAAA ATGGTGCTTT GAGGGTCAGC CNTTAGGAAG 60  
GTGCAGCTTT GTTGTCTTT GAGCTTCTG TTATGTGCCT ATCCTAATAA ACTCTAAC 120  
ACATTGAAA 129

SEQ ID NO:2510

LENGTH:125

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02883

SEQUENCE DESCRIPTION:

GATCTCTGAT TTAACCGTGT ACTATCCACA TGCATTACAA ACATTCGCA GAGCTGCTTA 60

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GTATATAAGC GTACAATGTA TGTAAATAACC ATCTCATATT TAATTAATG GTATAGAAGA 120  
ACAAA 125

SEQ ID NO:2511

LENGTH:124

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02884

SEQUENCE DESCRIPTION:

GATCTTCCAT CTCCCTCAGCA AAAAAATAGG AGCCCTGGCC CCCCAACTT TTNCANAGTA 60  
ATAGCCTTAN TTCCTTCCT ATCTCCTTAC CAAAGTACAN GTNACATCTT TCCCACCTT 120  
CNTN 124

SEQ ID NO:2512

LENGTH:124

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02885

SEQUENCE DESCRIPTION:

GATCTACAGA TTCAATGCAA TTNCTATTAA AATCTNATCT GGCTTTTT GCATAAGCAA 60  
CAAAGGAAAA ANTAAGACAT CAAAATTNA AGANCTTTG TCCTACAAAC AATATCATGA 120  
NGAN 124

SEQ ID NO:2513

LENGTH:343

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02886

SEQUENCE DESCRIPTION:

GATCAGAAAA TTCATATTAA AGCAAAGTGA TACAAACACA GTGATTTGGG AATGCCTTCA 60  
TTTACAATGC AATACTAAA TTTTAATACT CTTGTAGGAG AAAAGCAAC TGTATAATG 120  
AATGTAGAGT GACTTCTGC AATATTCAA ACCTATATCA GAGAATTACA CTGTGGAAA 180  
NCTACCATTG TAATAAGTGT AGCAAAATCT CCTTAGATAT CTGAAAAGTC ATACTGGATG 240  
GAATCTGTAG GAAACGGTTC TATTTGAGG GAAGGGGGAT CCCTTTTGT TTTTAAGTG 300  
AATTCAAGAAA ATGTTATAAA TAANTCTTTT GGTTTATTAT AAA 343

SEQ ID NO:2514

LENGTH:123

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02887

SEQUENCE DESCRIPTION:

GATCTNTACC CCACCCCTAT CTAACACCAAC CCTTGGNTCC CACTCCAGCT CCCTGTATTG 60  
ATATAACCTG TNAGGCTGGC TTGGTTAGGT TTNACTGGGG CAGAGGATAG GGAATCTNTN 120  
ATN 123

00923

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SEQ ID NO:2515

LENGTH:121

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02888

SEQUENCE DESCRIPTION:

GATCCAAAT TACCTCCTA TTGCATTCC TACTCCTTG CTACGNGTAT TGGACCTCTG 60

GCCAAATNAC AAAAGATGTA CTCTTGTNC TCTAAACCA CACTAAAGTT TTCTNACTNN 120

N

121

SEQ ID NO:2516

LENGTH:122

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02889

SEQUENCE DESCRIPTION:

GATCAACCAA CCTTAAATAT ATGTATGTAT ATATGTATAT GTGAAAACA GTTTGTATAG 60

TTGGAATATT TGTNTTTGTA ATTACTTGTG ATGTTTAAA ATAAAANTTT TATTCA GTTA 120

AA

122

SEQ ID NO:2517

LENGTH:122

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02890

SEQUENCE DESCRIPTION:

GATCTGGCAC CCCCTGGGTG GAGTGTCCCT CGGGGGCTTT GGGAAAGCAT GGCACCCCTCA 60

GACCACACAG TAGCCAAGTT CTGGAGCAAA TAAAAGGCCT GTGTTATNTC TTGTNCTTGA 120

AA

122

SEQ ID NO:2518

LENGTH:119

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02891

SEQUENCE DESCRIPTION:

GATCTCAAAG ATATGCACCA GTTTGAATAA ATGCTTGTAA AAAGATTAAA TTTTACAATT 60

CATTTAAAT TNTCATTGT TGACAATATT TCTAAACAAAC GNCCATTAA ATNACCAAA 119

SEQ ID NO:2519

LENGTH:118

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02893

00924

2153480

SEQUENCE DESCRIPTION:

GATCATAGGA TAGCTGACTT TGACAGTCAC ATTTATAAAG TAATTCACTT AAAGATATAT 60  
ATTTTTTCA AACAAAGTTT GCTACTTTG AAAATAAATC TTTCTTATA TTGCTAAA 118

SEQ ID NO:2520

LENGTH:118

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02894

SEQUENCE DESCRIPTION:

GATCCAAACC CATCTCCTG GACCTGAAGC TTATGCTTCC AGGCACCCCCA CTCCGTGAGCT 60  
GAATAAAAGAT GATTTAAGCT TAATAAAATCG TGAATGTGTT CACATGAGTT TCCATAAA 118

SEQ ID NO:2521

LENGTH:118

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02895

SEQUENCE DESCRIPTION:

GATCTGCACA GTGTTATGGC ACCCTACTTC CTGCAGCAAC GGGACACNCT GCGGCCGCAT 60  
GTNCAGAAC AGGAGGCCGA GANCCAGCAG CTGGCAGATG CCGTCCTNNC AGGGCGGN 118

SEQ ID NO:2522

LENGTH:118

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02896

SEQUENCE DESCRIPTION:

GATCCTATCT TTNCGGCAG GACTGGNAGC CATGGTGGGC TACGTTNTGN TCAGCGGCAT 60  
TNTTTCATC CAGCGGGCAA CGCTGCTCGG GCCCCAGGCA CCCGGACCCCT GGGCATGN 118

SEQ ID NO:2523

LENGTH:117

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02897

SEQUENCE DESCRIPTION:

GATCTAGTCC GGACTTGCTG TGTATATTGT AACGTTAAAT GAAAAAAAGAA CCCCCCTTG 60  
TATTATAGTC ATGCGGTCTT ATGTATGATN AACAGTTGAA TAATTGTCC TCAGAAA 117

SEQ ID NO:2524

LENGTH:116

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02898

00925

2153480

SEQUENCE DESCRIPTION:

GATCGTNATT NAGAATCCAT GTGAATAGAC CTGCGATGGC CAAGGCTGTT TAAGCNACAC 60  
TGGGTTGGAA ACACTTGGGC TCTCTCATNA TTATTAAT TCTATTCAA TCTAAA 116

SEQ ID NO:2525

LENGTH:116

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02899

SEQUENCE DESCRIPTION:

GATCCTTGCG NTCAGACT AAGTTAATAG AGAAGATGTT TGTAACNTG GCCCAAGCTT 60  
GGNCTCCAG TGTATTGAAG CTAACTCCTT TNAGAAGCAC CACTCTCATA TATNAN 116

SEQ ID NO:2526

LENGTH:117

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02900

SEQUENCE DESCRIPTION:

GATCTCTGGG TAAAGAGGCC GTTATCTTT GTAAACACGA AACATTTTC CTTTCTCCAG 60  
TTTTCTGTTA ATGGCGAAAG AATGGAAGCG AATAAAGTTT TACTGATTT TGAGAAA 117

SEQ ID NO:2527

LENGTH:119

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02901

SEQUENCE DESCRIPTION:

GATCTAGGAA GACTTTGGAA AGAGTAGGAA GACTTTGGAA AGACTTTCC AACCCCTCATC 60  
ACCAACGTCT GTGCCATTTC NTATTTACT AATAAAATTT AAAAGTNTG TGAATCAA 119

SEQ ID NO:2528

LENGTH:115

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02902

SEQUENCE DESCRIPTION:

GATCCCCAGG AGGCCTGGNC CGCCCAGAGG CTCCTCTCAG GCTGGGCCCG GACGTTGCG 60  
NCAGTGTTC TTGTGCCCGT GGGGCCGGGA GCNAGTAAAG TCTGGGCCAG GCAAA 115

SEQ ID NO:2529

LENGTH:119

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02903

00926

2153480

SEQUENCE DESCRIPTION:

GATCACGTTT CAGGGTCCTC CAAAANGCTA GCCCGGCACT ACACTAGGGA ATTCNCCT 60  
CTCCTGTAC ACATGGT CTCCTTGGT ATTAAAGGCC ACCATTGCA CAAAACAAA 119

SEQ ID NO:2530

LENGTH:114

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02904

SEQUENCE DESCRIPTION:

GATCCCAGAA ATGTAGCTTG TTTCATATTT TAGTCTTCTT ATTTTGTAAT AATGTGTAGA 60  
ATTTGCTGTT TTTNTTTTC TTTGACAAC TCAGGAAGAA ACTGACCTCA GAAA 114

SEQ ID NO:2531

LENGTH:119

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02905

SEQUENCE DESCRIPTION:

GATCAGCCCC CAAAGAAATG GGGGTGCATG CTGGGCCTGG CCCCTGCC CACCCCCACT 60  
TTCCAGGGCA AAAAGGGCCC AGGGTTATAA TAAGTAAATA ACTTGTNTGT ACAGCCAAA 119

SEQ ID NO:2532

LENGTH:113

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02906

SEQUENCE DESCRIPTION:

GATCTGGCT TCTAACACAGG GCAAAGATAC CAGGCCTNCT GCTGAGGTCA CTGCCACTTC 60  
TCACATNCTG CTTAAGGGAG CACAAATAAA GGTATTGAT TTTAAAGAT AAA 113

SEQ ID NO:2533

LENGTH:348

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02907

SEQUENCE DESCRIPTION:

GATCAAAATG TTTGAAGAAA GGAACTTAT TTTGCAAGT TACGTACAGT TTTTATGCTT 60  
GAGATATTTC AACATGTTAT GTATATTGGA ACTTCTACAG CTTGATGCCT CCTGCTTTA 120  
TAGCAGTTA TGGGGAGCAC TTGAAAGAGC GTGTGTACAT GTATTTTTT TCTAGGCAAA 180  
CATTGAATGC AAACGTGTAT TTTTAATA TAAATATATA ACTGCTTTC TCATCCCATG 240  
TTGCCGCTAA GTGATATTTC ATATGTGTGG TTATACTCAT AATAATGGGC CTTGTAAGTC 300  
TTTCACCAT TCATGAATAA TANTANATAT GTACTGCTGG CATGNAAA 348

SEQ ID NO:2534

00927

2153480

LENGTH:111

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02908

SEQUENCE DESCRIPTION:

GATCTGATGG TTTAAAAAT GGGAGCTTCC CTNCACAGAC TCTNTCTCTC GTGCCGCTGC 60  
CATGGCCATG TAAGNAGTGC CTTTNACCTT CCCCCGTGAT TGTNAGGCCT N 111

SEQ ID NO:2535

LENGTH:110

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02909

SEQUENCE DESCRIPTION:

GATCCCAACA GGACAAATCT GTGTACCTAT CTTCTATCC TCCCTGAGCC TGTACCAACT 60  
AGATTCTCA TATGTATTG TAACAGATTA AATTGGAAAG CAAACACAAA 110

SEQ ID NO:2536

LENGTH:110

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02910

SEQUENCE DESCRIPTION:

GATCCCCAAC TGCTCCAGCC TCTGCCAAC TGAATCTCA GCATGTTCTC ATCGGCGGAC 60  
TNTCTTGTT AATGTAAACT GTGCCATGTT ATTAAAAAT GTGAACCTAA 110

SEQ ID NO:2537

LENGTH:110

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02911

SEQUENCE DESCRIPTION:

GATCTGTTG GAAAACATAG ATTGTTTCC CCTCAAATAA GGGGAAAAAA AAANACCCTT 60  
TNTNCAAATN GNTTCTTTG TAAAAAATTA TTTAAAAGG AAATCACAAN 110

SEQ ID NO:2538

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02912

SEQUENCE DESCRIPTION:

GATCTTTA ACTCTACTGT GTCATTAAGA TGCTTTGTAC AATGCCAAC CATACTTGG 60  
GAAACTAAGT TTAATAATA TCAAATAGAT TTTCTGTATT AAAGTTAAA 109

SEQ ID NO:2539

00928

2153480

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02913

SEQUENCE DESCRIPTION:

GATCTCCCC ACCCTGGAT TAGAGTTCC GCTCTACCT ACCCACAGAT AACACATGTT 60  
GTTTCTACTT GTAAATGTAA AGTNTTAAA ATAAACTATT ACAGATAAA 109

SEQ ID NO:2540

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02914

SEQUENCE DESCRIPTION:

GATCTCCTNT CCCTCACTCA GTGCACGGGA CAGCTNCTCC TCCGTACAG CTTTGGNATG 60  
AAAGACAGAA GACAGCATGA TTGGCCTCAC CCACGTGCAG GNCAAATNN 109

SEQ ID NO:2541

LENGTH:107

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02915

SEQUENCE DESCRIPTION:

GATCTGTAC TCAACTTGCT GCGTNACCTG AACACGTAC TTTACCTCTC TGTGCCTCAG 60  
TTTCCCATG CATGAAAAAT AAAATAAAAT AAAACGGGGA TTCTAAA 107

SEQ ID NO:2542

LENGTH:112

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02916

SEQUENCE DESCRIPTION:

GATCAGTAAG GATTCACCT CTGTTGTAA CTAAAACCCT CTACTATATG TTAGACATGA 60  
CATTCTTTT CTCTCCTTCC TGAAAAATAA AGTGTGGAA GAGACAAATA AA 112

SEQ ID NO:2543

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02917

SEQUENCE DESCRIPTION:

GATCATAGAA GGTTGGGTT CCAGAAAGGC ATCTGTGTGA TGGTCCATT GATGTGGAT 60  
TTCCCTACTT GCTGTATTCT CAGTTCTAA TAAAAAGAAC CAAATNAAA 109

SEQ ID NO:2544

00929

2153480

LENGTH:108

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02919

SEQUENCE DESCRIPTION:

GATCCAGGAG ATANTTTT CATTCACTC GACCAAGACT GAGCCAGCTT AGCAACTNCT 60  
GGGGAGACAA ATNTNAGAAC CTTGTCCCAG CCAGTNAGGA TGACAGTN 108

SEQ ID NO:2545

LENGTH:343

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02920

SEQUENCE DESCRIPTION:

GATCGAGCCC AGCGTACAAC TTCCCTCAAGT CGCCCCAAGA CAACGTGGAC GACCCCACGG 60  
GGAACCTTCG CAGCGGGCCC CTGACGGGT GGCGGGTGTT CCTGCTGCNN NNGTGCCTC 120  
TCCTGGGCAT CGTTGTCTGC GCCGTGGTGG GGGCCGTGGT GTTCCAGAAG CGGCAGGAGC 180  
GGAACAAGCG CTTCTACTGA GTGGCGCTC CGGCAGGTGG CTGTCCCTGG GCCCAGGAGC 240  
CAATGTGAAC TTTTTGGNT ACCGGGATTA TAAANGAAC ACAAAGATGAC CTTATTTCTT 300  
AACTGTTCA AATAAAATGA TTAAAAGTAT TTCAAAAAA AGN 343

SEQ ID NO:2546

LENGTH:107

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02921

SEQUENCE DESCRIPTION:

GATCCTGCCG TGCCCCCATC CTGGCTGTT GGGGTGTCT GAGCCACCT NNNTNCGCCT 60  
GTTCCCTTCA GCCAACCCGT TTCTGCAGTA AAATTAAGCC TGTCAAA 107

SEQ ID NO:2547

LENGTH:105

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02922

SEQUENCE DESCRIPTION:

GATCACTGAA CCAGACACAG CATTGCTGAC ACATGAGACT AACACGTGCA ATTATTTAAA 60  
AAGATTCAA TAAAACTNCC TGGCTGGCTC CGGGCCGCC CTAAA 105

SEQ ID NO:2548

LENGTH:103

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02923

SEQUENCE DESCRIPTION:

00930

2153480

GATCCTGTGG GTTTAGTATC ATTATCTTCA GCTCTTGAT ACNCTGTGTT AGAGTAATAG 60  
CTAAAGGAAG TTCATGTCAA TAAATTCTATA CTTATATCAC AAA 103

SEQ ID NO:2549

LENGTH:104

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02924

SEQUENCE DESCRIPTION:

GATCCAGAGC TGGGGTGGAA GGAGAGCCAT TCTGAACGNC ACGNCTGGCC CGGTCACTGC 60  
TGCATGCACT GCATATNAAA TAAAATCTGC TACACGCCAG GAAA 104

SEQ ID NO:2550

LENGTH:103

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02925

SEQUENCE DESCRIPTION:

GATCCCNAGG CTCTGTTCCA TGAGCCTGTT GCANGTTTG GTACTTTAGA AATGTAACCT 60  
TTTGCTCTTA TAATTTTATT TTATTAATT AAATTACTGC AAA 103

SEQ ID NO:2551

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02926

SEQUENCE DESCRIPTION:

GATCGATGAG GCAGGTCAGT TGTAAGTGAG TCACATTGTA GCATTAATT CTAGTATTT 60  
TGTAGTTGA AACAGTAAC TATAAAAGA GCAAAAGCTA AA 102

SEQ ID NO:2552

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02927

SEQUENCE DESCRIPTION:

GATCATATCT AGTNNTNAAA TCTCTAGGAA CAATAGAGAT TATATCTAA CTCTGAAAGAT 60  
GGACTCTAAA CCTTGTTA CCTCCATGGA AAATAANCNN 102

SEQ ID NO:2553

LENGTH:101

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02928

SEQUENCE DESCRIPTION:

00931

2153480

GATCGAATGA GGGTAAATG AATTATTC A TGAAAGCTC TTAGCCCTGT GCCTGGTACA 60  
TAGTAAATNC TAAATAAATA GTGGTATTCT TACTGTTAA A 101

SEQ ID NO:2554

LENGTH:390

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02929

SEQUENCE DESCRIPTION:

GATCCAGCTT ATTCTTTAT TTTCAAGTCC ATTCTTGGGG CTGGTGGGG A GGCAGGAGAA 60  
TACCCCTCCC TAAGCCCTTA GTGTGTGCCG AGCTTGCTTT NTGATGTG CAGGGGAGGG 120  
GAGACCTGGG TGGTGNCCTGA GTTCCCTTTA TCAAACCCCT CAATGGGCAC AAAATTGAGT 180  
GCTTNNTNN TAGGTTTAT TTNNNNATGA ATGTCCAAAT CTGTGTTCC CCCTGCCANA 240  
ACAGACTGTG TGGCCAGTTG AAAGTGTCTT GGTTTGTGGT TCATCTCTCC CTCATTTCT 300  
TGGAGGCAGG GCCTGAGANC CCTGN CANAA TCTCCTATGG TTNTGAATCC ACGGCTTCTT 360  
TTTGGACATT AAAGGTTGAT TTGATGAAA 390

SEQ ID NO:2555

LENGTH:227

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02930

SEQUENCE DESCRIPTION:

GATCTATCCT CAGCACTGCT GAGTGTGCAG TCACACTTTC CTACCAACCC NCTTCTTACC 60  
ATCTCTAGCT GCCATTGTG GGGGAACAA AACAAAGGAA TCCTGATTGT GTACAGTATA 120  
AATTGTATTA TATTTTTGT ACTTATGTT TATGTAATAA GTTTGTCTCA TTCAATTGTA 180  
TGTGAGCATT GAAATAAACCT ACCATTAA GGGGAAAAAA ATNNAAA 227

SEQ ID NO:2556

LENGTH:106

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02931

SEQUENCE DESCRIPTION:

GATCTTCAA AATAATGCCT CTGTCTAGCA TGCACAACAG AATGCATTGA TATTGTGAAC 60  
ATTGTGATA TATGTATTA TAAATAGAGC AATTACAAGC AGCAAA 106

SEQ ID NO:2557

LENGTH:99

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02932

SEQUENCE DESCRIPTION:

GATCTTCTT ACACAGTGT TCATTCCTCT ATTGTACAG TGGCTTTATG AAATATTGTG 60  
AATTGATACT GTAATCAATA AAGTGCTTT ACCAGAAA 99

00932

2153480

SEQ ID NO:2558

LENGTH:98

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02933

SEQUENCE DESCRIPTION:

GATCCTGGTT CCCTGTTGG AAAATTCAAC ACCTCTAGCT CCTCACTGTT CTTTGTAAATT 60  
AACACGCTGT TGGTAATCTT ATTAATTATT TAACCAAA 98

SEQ ID NO:2559

LENGTH:97

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02934

SEQUENCE DESCRIPTION:

GATCTGGGGA CCCTGACTGC ACAGAACAGT GGGCGCNTTA CAGACCACCG ACCGCCCCGAG 60  
GGTGAATTAC ATCTTAATAA AGCTACTGTG AGAGAAA 97

SEQ ID NO:2560

LENGTH:93

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02935

SEQUENCE DESCRIPTION:

GATCGCCGCC AACATCCAGG CTGACTACTT GTATCGGTGA CGCCCCACCG GCCCGCAGCC 60  
CCTGCTGCC AATAAAACCA CTCCGACCCC AAA 93

SEQ ID NO:2561

LENGTH:92

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02936

SEQUENCE DESCRIPTION:

GATCATCCCT TGACAGTAGT TTGCTTCAT CTCACCTTC ATTTGTCCA AANNCACCTA 60  
TATTTAATAA AGTCCCCCC NGTNGTCTCA AA 92

SEQ ID NO:2562

LENGTH:91

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02937

SEQUENCE DESCRIPTION:

GATCCACAAA ATGAGACAAT GCATGTGAAA ATCCATGCTC ATGTTCTAAA CATGGAACT 60  
AGGAGCCTAA TAAACTTCCT AATTCAAGTAA A 91

00933

2153480

SEQ ID NO:2563

LENGTH:96

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02938

SEQUENCE DESCRIPTION:

GATCGTATT TTATATCATA TTCACATATT TTTTTTTA ATTGGTGTAA GATGACATGA 60  
TTAATAAAAA AGGCAAGATA TTTTCAGAAT TTGAAA 96

SEQ ID NO:2564

LENGTH:88

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02940

SEQUENCE DESCRIPTION:

GATCGGCCA TCGCACTCTC AGCCTGGCA ACAAGAGTGN AACTCCATCT CAAAAAAATA 60  
AAAATAAAAT AAGTAAGNAA TACCTAAA 88

SEQ ID NO:2565

LENGTH:87

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02942

SEQUENCE DESCRIPTION:

GATCTAATAT ATATCATCAG AAAATATATA TTGTATGTT ACTCTTATT TCAGAAAGAG 60  
AAAATGAATA AAAATGATGA CATCAAA 87

SEQ ID NO:2566

LENGTH:87

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02944

SEQUENCE DESCRIPTION:

GATCGCTTGA NCCCAGGGT TTAAAACCAG CCCGAGGAAC ATGGCGAAC CCCATTTA 60  
CAAAAAATAC AGAAATNAGC CAAGAAA 87

SEQ ID NO:2567

LENGTH:86

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02946

SEQUENCE DESCRIPTION:

GATCTAAGGG GTGCCATGG TGTGAACAA TGCAACTTT TATTTAAAAA AGCTCTGCAC 60  
TGCCATGTAT GAAAGNTCT TTATGN 86

00934

2153480

SEQ ID NO:2568

LENGTH:86

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02947

SEQUENCE DESCRIPTION:

GATCCNGGAT TGCTGGGAAT GGAAGCCAGG TGGGGTCATG GCACAAGTTC TGTAAATCTTC 60  
AAAATAAAAC TTTTTTTTG TACAAA 86

SEQ ID NO:2569

LENGTH:85

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02948

SEQUENCE DESCRIPTION:

GATCCTGCC ACTATGCCAG TTCTGACCTC GCATCCCCCT ACCCGAGCC CATGCAGTCT 60  
GGGAACATGC CGCCTCTCT CCAAA 85

SEQ ID NO:2570

LENGTH:85

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02949

SEQUENCE DESCRIPTION:

GATCAAATTG TACTAGTGTC TGCAAGGTTT GTCAAGTACTC GTCAAAGCCA AGTCCAATTA 60  
AAAAAAAAAG TCTTGCCCT CCAAA 85

SEQ ID NO:2571

LENGTH:85

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02950

SEQUENCE DESCRIPTION:

GATCTTTCT TTAAAATTTC TCTGCACACA CAGGACTTCT CATTTCCAA TAAATGGGTG 60  
TACTCTGCC CAATTCTAG GGAAA 85

SEQ ID NO:2572

LENGTH:85

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02951

SEQUENCE DESCRIPTION:

GATCTTTAC CCCTTCACT CTTGGCTTTC TTATGTTGCT TTCATGAATG GAATNGAAAA 60  
AAGATGACTC AGTTAAGGCA CCAAA 85

00935

2153480

SEQ ID NO:2573

LENGTH:84

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02953

SEQUENCE DESCRIPTION:

GATCTGCCTG ATGGGAGGGC TCCTGTGAG GGAGACAGAC ATATCCCCAC TGAAAAATT 60  
ATAAAATTGG TTTTACATAT CAAA 84

SEQ ID NO:2574

LENGTH:84

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02955

SEQUENCE DESCRIPTION:

GATCTGACTG GAAAACAATC CTGTATCCCC TCCCAAAGAA TCATGGGCTT TTTTTTNAN 60  
TTAAAAAGCA GACAAATAGA CAAA 84

SEQ ID NO:2575

LENGTH:82

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02957

SEQUENCE DESCRIPTION:

GATCAAAAGA AACTAAAAAA GTGGAATGGG ATATGGCTT TGGTACCTGA AAATAAATNC 60  
TTAATAATT GTAAGCCAGA AA 82

SEQ ID NO:2576

LENGTH:82

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02958

SEQUENCE DESCRIPTION:

GATCAAAAT ATAGTTATAA TTTNTAAAT TNAAAAATG TGATTGCNCT AATAAAGAAT 60  
AAAANCTATG CTTTAAACA AA 82

SEQ ID NO:2577

LENGTH:85

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02959

SEQUENCE DESCRIPTION:

GATCACTGCA GNTCTAGGA CCCGGTTCT TTTACTGATT TAAAAACAAA ACAAAAAAAA 60  
ATAAAAAAAGT TGTGCCTGNN ACAAA 85

00936

**2153480**

SEQ ID NO:2578

LENGTH:81

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02960

SEQUENCE DESCRIPTION:

GATCTCCCAT AATTGAAAT TGAAATCGTA TTGTGTGGCT CTGTATATTC TGTAAAAAAA 60

TNAAAGGACA GAAACCTTAA A 81

SEQ ID NO:2579

LENGTH:79

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02962

SEQUENCE DESCRIPTION:

GATCCACCAT CTTATCTTGG TGCCATCCCT GACTTGGCTT CTGTCATAA ATGCCTATTA 60

AATGTTCTT TCTGAGAAA 79

SEQ ID NO:2580

LENGTH:79

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02963

SEQUENCE DESCRIPTION:

GATCCAATTG CTGGTTACAT TTTGGGAAGC TCTCATTAA GTGCTATGTA GTTCATTGA 60

ATAAACTGTT TAATATAAA 79

SEQ ID NO:2581

LENGTH:75

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02964

SEQUENCE DESCRIPTION:

GATCTAAGAG GAAAGTGGTT ATCGGTTGCN NTTTATTTAT AAAGGATGCA AACATAAAAT 60

TAGATTTTG GCAAA 75

SEQ ID NO:2582

LENGTH:73

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02965

SEQUENCE DESCRIPTION:

GATCAGCCTT TTTGTTCAA TGAGGTGTCC AACTGGCCCT ATTTAGATGA TAAAGAGACA 60

G TGATATTGG AAA 73

**00937**

2153480

SEQ ID NO:2583

LENGTH:72

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02966

SEQUENCE DESCRIPTION:

GATCCCAGAG TGGCTGCCT ATCACAAACCA CATCCCTTCC CCCCCACAAGG CAATAAATCT 60  
CATTCTTTA AA 72

SEQ ID NO:2584

LENGTH:72

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02967

SEQUENCE DESCRIPTION:

GATCAACGAC AAAATGCCT TCTCCCTCAA GNAGTGAGGC TTGGTCCAAT ACATGGCTCT 60  
GCCCGCCAGA AA 72

SEQ ID NO:2585

LENGTH:72

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02968

SEQUENCE DESCRIPTION:

GATCAATCTT GTATTTCTG ACCACATAAA GGCTTCTTCT CTTTGTATA AAGTAGAAAA 60  
GCTCTCCTCA AA 72

SEQ ID NO:2586

LENGTH:166

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02969

SEQUENCE DESCRIPTION:

GATCTTGTCTT CTGAAGATGG TTTAAGTTAT AGCTTCTTAA ACGAAAGAAT AAAATACTGC 60  
AAAATGTTT TATATTGGC CCTTCCACCC ATTTTAATT GTGAGAGATT TGTCACCAAT 120  
CATCACTGGT TCCTCCTTAA AAATTAAGGG GTAACCTCTG TGTAAA 166

SEQ ID NO:2587

LENGTH:71

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02970

SEQUENCE DESCRIPTION:

GATCATAGGA GAGACCCATT NGCTAGCTAC TTCATTGTT CTGACCTAAT AATAAAAGTT 60

00938

AGAACCTAA A

71

SEQ ID NO:2588

LENGTH:72

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02971

SEQUENCE DESCRIPTION:

GATCTGACGT TCCTTGTGAC TTAAGGGTCC GGCTTGGGAA TTAAAGTTG TTTCTGGCCT	60
TTAGCCTACA AA	72

SEQ ID NO:2589

LENGTH:70

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02972

SEQUENCE DESCRIPTION:

GATCTGGCCA GTCAAGGGTC CACAGGGTGC CAGCCTCTCA CCCTCAGAAT AAAGACATCA	60
GCCATTCAAA	70

SEQ ID NO:2590

LENGTH:69

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02973

SEQUENCE DESCRIPTION:

GATCATCTAA ACTGAGTCCA GCTGCCTAAT TCTGAATATA TATATATATA TATATCTTT	60
CACCATAAA	69

SEQ ID NO:2591

LENGTH:68

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02974

SEQUENCE DESCRIPTION:

GATCCTTATT ACAGGAAAAG CATGAGTGTT GGCTAACCTG ACCAATAAAG TTATTTATG	60
ATTGCAAA	68

SEQ ID NO:2592

LENGTH:68

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02975

SEQUENCE DESCRIPTION:

GATCTTAGAT TTTATGTAGT ATTAAGTGAA AAAATACGAA AATAATAAAC ATTGAAGAAA 60

2153480

AAAATAAA

68

SEQ ID NO:2593

LENGTH:75

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02976

SEQUENCE DESCRIPTION:

GATCACATT TCTGTTGGTT AACATTNTTC CTAGCTTATA TGATGGAATT AAATATATTTC 60

TGTGTAAAAA GGAAA 75

SEQ ID NO:2594

LENGTH:67

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02978

SEQUENCE DESCRIPTION:

GATCCACCTA ACAAGAAACC TAAAGTGTAG AGATTGCCAT TTNATTGT AATTTTTTT 60

TTTTTN 67

SEQ ID NO:2595

LENGTH:66

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02980

SEQUENCE DESCRIPTION:

GATCACACAC CGGCTGTATT TAATATGTAA CATTTCACA NATATTAAG ANACAGAAGT 60

ATTAAA 66

SEQ ID NO:2596

LENGTH:65

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02981

SEQUENCE DESCRIPTION:

GATCAGCATG GGCCACGTAG NCNGACTCC ATCTCTACAC ATAAATAAAA ATTAGCTGG 60

GCAAA 65

SEQ ID NO:2597

LENGTH:63

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02982

SEQUENCE DESCRIPTION:

GATCCAATTT ATGTTTTTC TTTNTTTATA TTTTGGGAA AATTAATATT TTTTAAGGT 60

00940

2153480

AAA

63

SEQ ID NO:2598

LENGTH:61

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02983

SEQUENCE DESCRIPTION:

GATCACGCAA TAATGACTAT GTAATCTCAA AAAACAAATA AAATATTCTT AACATGGCAA 60

A

61

SEQ ID NO:2599

LENGTH:60

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02984

SEQUENCE DESCRIPTION:

GATCCAAGCA GTGTGTCACT ATATAACTGA TAAAAGCACT TGGTCTTNGA TTATCAGAAA 60

SEQ ID NO:2600

LENGTH:58

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02985

SEQUENCE DESCRIPTION:

GATCATTTG CACATAGCTT TATCAACTTT TAAACATTAA TAAACTGATT TTTTTAAA 58

SEQ ID NO:2601

LENGTH:58

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02986

SEQUENCE DESCRIPTION:

GATCTTGCA GTTTGNGAC AATTACAAGT AAAGCTGCTA TAAACATTG TATGAAA 58

SEQ ID NO:2602

LENGTH:74

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02987

SEQUENCE DESCRIPTION:

GATCGACACG CAGCTAGCCT CCTGCATTGT ATGGTTATAA ATAGCACCCCT AGTGAGTNCT 60

GTCGTCCAGT CAAA 74

SEQ ID NO:2603

00941

2153480

LENGTH:58

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02988

SEQUENCE DESCRIPTION:

GATCCTGGGG CAACCCATCT GGTCTTTGA ATAAAGGTCA AAGCTGGATT CTCGCAAA 58

SEQ ID NO:2604

LENGTH:56

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02989

SEQUENCE DESCRIPTION:

GATCACGTTT CGTGTTCATA CTCAACGTTA ATAAAAGGAG AGAGTTTGTA GTGAAA 56

SEQ ID NO:2605

LENGTH:55

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02990

SEQUENCE DESCRIPTION:

GATCGCTGTG CCTGGCATAT AGTAGGTGTT CAATAATGC CCTGTGACTC TCAAA 55

SEQ ID NO:2606

LENGTH:59

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02991

SEQUENCE DESCRIPTION:

GATCTATCCT CAACAACAAC AGAAAAAAGG AATAAAATAT CCTTTGTTTC CTAGTGAAA 59

SEQ ID NO:2607

LENGTH:54

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02992

SEQUENCE DESCRIPTION:

GATCCATTAA AAAATTGTA ATTCAATAAA GTTTTTTG TTGTTAAACA TAAA 54

SEQ ID NO:2608

LENGTH:53

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02993

SEQUENCE DESCRIPTION:

00942

2153480

GATCTTGTAT TCAGTCAGGT TAAAACAACG GACAATAAAA GAATGAACAC AAA 53

SEQ ID NO:2609

LENGTH:52

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02994

SEQUENCE DESCRIPTION:

GATCTGGGGT GGGAGTAACA GGGCAGAAAT GATTAAAATG TTTGAGCACA AA 52

SEQ ID NO:2610

LENGTH:52

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02995

SEQUENCE DESCRIPTION:

GATCCTTTT TTTTCCACA AAATTTTAC AAATAAAAAA TGTTCCCCTA AA 52

SEQ ID NO:2611

LENGTH:52

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02996

SEQUENCE DESCRIPTION:

GATCTCAAAG TGCCTCTGA AGCATCAGAG ATTAAATATT GTTCAAACTA AA 52

SEQ ID NO:2612

LENGTH:53

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02997

SEQUENCE DESCRIPTION:

GATCTGAATG GGGCTNCCT GATGTTGGTA TCTAAGGCTT AGGCCTATAG ATN 53

SEQ ID NO:2613

LENGTH:50

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02999

SEQUENCE DESCRIPTION:

GATCTTGAAT GTATTTCTT AAGTTTATTA ATAGACATT TCACAATAAA 50

SEQ ID NO:2614

LENGTH:50

TYPE:nucleic acid

00943

2153480

TOPOLOGY: linear

CLONE:HUMGS03002

SEQUENCE DESCRIPTION:

GATCTATCTG GAAAATGNAG GACTCCGAAT AAAAAGCTAT TACTAATAAA

50

SEQ ID NO:2615

LENGTH:51

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03005

SEQUENCE DESCRIPTION:

GATCAGGGGA AATNTTAAG CTAATAAAT CTGGGGGGTT TTTTATTCAA A

51

SEQ ID NO:2616

LENGTH:165

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03028

SEQUENCE DESCRIPTION:

GATCGAACATGG TATATATTAG AAATTACATC TGTTGTAATT AAAATTGTGT GAGCAATTAA 60

ACATGGTTGA NTTTTCAAG CAAAAATCAG TTCATCTTT GATGTAATT TCTAGGCTAA 120

ATGGCAATCT CTGAAAGATG AATAAAGCTA TATTATTTA GCAA 165

SEQ ID NO:2617

LENGTH:254

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03030

SEQUENCE DESCRIPTION:

GATCACATTT TAAGCATCTN TCTCTCCTAC TCCATTAGA AAAATAAGTA ACAGGTGAAA 60

TGTGGTCTCA GTGTTAACGG GATAATTCTG CTACCGGCTC CTCCCTGATG ATTCTNAAAT 120

ACACTACTGA ACGAGCTCTG GCTGGTCCTT TCTATCCTGG ATGTGGTTCT TCTGTGTAGC 180

AATTCCCTGA NGTCCAGGTT GGAAAGATGT ACTCTTCTCA ACCAAGGAAA ACCTAAATC 240

CCGTCTGTGGC CAAA 254

SEQ ID NO:2618

LENGTH:271

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03031

SEQUENCE DESCRIPTION:

GATCAACCCC AGACTGGGCC AGAATGTTAG TGAAGGTTT ATTGTGCCCG GTTGGAGGAT 60

AACGTTCTT GGGTACTTT TGTGGTTGC AAATNAACTC AATTGCCACA AGTTTAAAC 120

TGGTGAAAT CAAGCTTGAC TTAATGTGAT TGTNACTGTT ATATCCAGNC TATACTGCTA 180

GCAGCTGCTC ATACTGCAGT CAATTACTGG AAGCGGATAT ATTCCTATG CAAAAACTGT 240

00944

TTAAACAATA AAATGAGCTA TGCTACAGAA A

271

SEQ ID NO:2619

LENGTH:489

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03053

## SEQUENCE DESCRIPTION:

GATCCACAGC TTAAAGATGG GAATTCAAGGT ATGAAAGAAA ACAGGCAAGG AGGCACGTGAG 60  
 GGAGAAAGAC ACAGACTTA TCGCTCTGTG GCTCATTTGT ACTGGAATAT NCTAAAACTC 120  
 TTGTNCACAT GCTATTATGA CTTATAAAGC AGCAACAGCT GAGGCGCACC AGGACACAGC 180  
 TTCCATTCTTCT TTAACGTCTG TNCCCTTAAC ATCGCTGAAA TNATTTACTG TTGAAGAGAT 240  
 GCCTTGCGGT GTGCCAGCT GTGAGGGAGAA AGCAGCTGGC AGTGTAGGA CATTAGTCCA 300  
 CCTTCAGCGC AGGGTCTCTG GCCGGGTCTG ACTCAGAAC CTTGGTACTC GNCCCTTGGN 360  
 CACAGTGCCTC AGACCCATGT AACCNACTNG NTCTGCATT AACCNAGAAA TACCTCGGTT 420  
 CTATNTGTGC ACTTAGCTGG GGACTTACCC ACTGTAATCA CCTNAATNAA NGGGTTNTAA 480  
 ACATGGAAA 489

SEQ ID NO:2620

LENGTH:471

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03055

## SEQUENCE DESCRIPTION:

GATCCAAAAC GCTTCGAGGC ACCCCAAATN ACCTGCCAT TCGTNAGGAN GACCCACCCA 60  
 CCCAGTGTAA TATTCTGCCT CGCCGGAGTG GGTGTNCCCC GGGGCACCTTG CCGACCAGCC 120  
 CCTTGCCTCC CCAGGTTTG AGCTCTCCCC TGGGCCACTA ACCATCTGG CCCGGGCTGC 180  
 CTGTNTGACC TCCGTGCCTA GTCGTGGCTC TCCATCTTGT CTCCCTCCCC TGTCCTTAAAT 240  
 GTNTTCAGTG GGGGGCCCCC TCTTGGTCC CCTCCTCTGC CATCACCTGA AGACCNCCAC 300  
 GGCAAANACT GAATGTAANC TGTGNCTGNM GNCTCGGTCC AACTTGCGGN CCGTGTNTNA 360  
 CTNAACTNAG CTCTTAAAC GGTAATATTT CNGGGAAAAT CCCATGNTTG GGTTTGGTC 420  
 TTTAACCTTG GTAACGGTTG AAATCCAATT AAAGNTTAA AAGTCATGAA A 471

SEQ ID NO:2621

LENGTH:435

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03056

## SEQUENCE DESCRIPTION:

GATCACCATT AAATCTGAAA GTACCTTAA AAATACTGAG ATTNCCTCA TACTGGGCCA 60  
 GGNATTTNAC GAAGNACCTG CAGATGACAG GAAAGTCAG AGCACCATAA CCTTAGATGG 120  
 GGGTGTCCCTG GTACATGTNC AGAAATGGGA TGGAAAATCA ACCACCATAA AGAGAAAACG 180  
 AGAGGNTGAT AAACTGGTGG TGGAAATGCNT CATGAAAGGC GTCACTTCCA CGAGAGTTA 240  
 TGAGAGAGCA TAAGCCAAGG GACGTTGACC TGGACTGAAG TTCGCATGAA ACTCTACAAAC 300  
 ATTNTGTGGG NTATATTGTT CAAAAAGNTA TTGTNGTTT CCATGGATT AGCAAGCAAC 360

TAATTTNTC CCAAGCTNGN TTTTTCAA TANTGGTNAC GTTGGNTAAA TAAANNTTT 420  
 TTTAGGNTTT TNAAA 435

SEQ ID NO:2622

LENGTH:411

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03058

SEQUENCE DESCRIPTION:

GATCTCATCA GGGGAAGGCT CTGTGATGCT GCAGGTTGAT GTAGACACAG TAAAAGGAGG 60  
 GCTGAAGTTG AACCCCAACT NNCTGGTGGA CTCGGGAAG GAGCCCCCTG GCCCAGCCCT 120  
 TGCCCAGAG CTCCGCTACC CTGGGGCGA TTGTAGCTCT GACATCTGGA TTTGAACCTCC 180  
 ACCCTCATCA CCCACACTCC CTATTTGGG CCCTCACTTC CTTGGGGACC TGGCTTCATT 240  
 CTGCTCTCTC TTGGCACCCG ACCCTTGGCA GCATGTACCA CACAGCCAAG CTGAGACTGT 300  
 GGCAATGTGT TGAGTCATAT ACATTTACTG ACCACTGTTG CTTGTTGCTC ACTGTGCTGC 360  
 TTTCCATGA GCTCNTGAG GCACCAAGAA ATAAACTNGT AACCTGTAA A 411

SEQ ID NO:2623

LENGTH:410

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03059

SEQUENCE DESCRIPTION:

GATCCAGCGG GGATGGAGTG TGGAGTGTGG GCACAGTGGC TTGTACAGGC CTGGNCTGGG 60  
 CAGACTTGCC CCGGAGTCTC AGGCCACTGC GGAAGGAGGA CGCGTGGCCA GCAGGTGCCA 120  
 CCAGGAGAGG AGAGGAGGGC CAGGCTGAGC TGCATCTNTG GACTCCAAGG AGAGCTTGGA 180  
 GAGGTGACTG AAACCCCTGCC CCACCCCCAG CCTGTNTCCA TCTGTGGGTC CTTGGGCAAA 240  
 TTGCTCTCATC TCTCTNAGCC TCGAATGCGT AGTTTCAGGA CTAACTAGGG TACTGTGTAC 300  
 CAACTGCCTC TGCCAACGGC CCTGCACTGG GCANGCCTGG GGTACCTGGG CTTTGGGGNA 360  
 AGGAAGTAGG CCTTNGGNAG GAGGCTGGAT TGCTTACAAT TTTNTTTT 410

SEQ ID NO:2624

LENGTH:408

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03060

SEQUENCE DESCRIPTION:

GATCTGGGGC CCATCTACAT CTCTGTGCAG CCGCCTTCAC TGACACGTGCN GGAGCAGCGG 60  
 CTGCGGCAGG CATACTGAA ACCGAGGAG AGCCTGGTGA AGCGGCTNGC TGNTGCCAGG 120  
 CCGACATGGA GAGCAGCAAG GAGCCCCGGCC TGTGTTGATGT GGTCTCATCATT AACGACAGCC 180  
 TGGACCAGGC CTACGAGAG CTGAAGGGAGG CGCTCTCTGA GGAAATCAAG AAAGCTCAA 240  
 GGACCGGGCGC CTGAGGCTTG CTGCTGTTC TCGGCACCCCG GGGCCCATAC AGGACCAGGG 300  
 CAGCAGCATT GAGCCACCCCTTGGGAAGG CGATACGGCA GCTCTGTGCC CTTGGCCAGC 360  
 ATGTTGGAGT TGGAGGAGAT NCTTGGCCCT GTTGGTTGG ACCATCCN 408

SEQ ID NO:2625

LENGTH:398

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03061

## SEQUENCE DESCRIPTION:

GATCTCAACG AGACAAACGA TGGGTGGACC CGAACTCCCC GGTGCTCTTN GAGGACCCAG 60  
 TCCTTTNTGC CTTGGCAAAA AAGCACAAGC GAACCCCAGC CCTGATTGCC CTGCGCTACC 120  
 AGCTGCAGCG TGGGGTGTG GTCCCTGGCCA AGAGCTACAA TNAGCAGCGC ATCAGACAGA 180  
 ACGTGCAGGT TTTTNANTTC CAGITGACTG CAGAGGACAT GAAAGCCATA GATGGCCTAG 240  
 ACAGAAATCT CCACTATTT AACAGTGATA GTTTGCTAG CCACCCATAAT TATCCATATT 300  
 CAGATGANTA TTANCATGGA GGGCTTGCC TGATGGNTA CCAGAAGCCC TGTGTGTGGN 360  
 TGGGTGACGC AGAGGGACGT CTCTNTGCCG GTGACTGN 398

SEQ ID NO:2626

LENGTH:394

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03062

## SEQUENCE DESCRIPTION:

GATCACAGCT GGGGGAAAAA AAGCTTTTA ATTCTGTACC TTCCTAGTAG ATAAGTGAAG 60  
 AGCAGGGAAA GAGACCTTTA AATATTTNC TATAAAAAAA TTTGTGATAA GTTCTATCA 120  
 AAATGGGGAG ATTGCAGAAA AGGCTTCCCT TGGNTCCCA GGAGGTGTAG CAGGTGTGAG 180  
 CAATATTAGT GCCATGTGCC TTTCACACAG GTTTCGATT TATCAGCTG TTTCCGATG 240  
 NNNNGGTACA TGAAAGAGTA CACCATGTGA AGAGAAGAGA GAATGATTGA AAATGTTTA 300  
 GTATAGACCT CTTCTTGCA TGGGTTGCTA TTTCTAGAT TTTACTTTT AGGGACCAAA 360  
 NTAAANTCCT TTGTTAACN TGGTCAGNG NAAA 394

SEQ ID NO:2627

LENGTH:392

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03063

## SEQUENCE DESCRIPTION:

GATCGCACCA TTACACTCCA GCCTGGGTGA CAGAGAGAGA CCCTGTGCCN NTCAAAAAAA 60  
 TGTTTTTTT AAACAAGAAT CTCTCAGGCA TACTGAAATN TTGAAGAGGA AATNATATTA 120  
 ATATCTGGGA CTTGTTCCA AATTGGAAT TGGGGCAGGG TGTAATNGT TGGCAATATC 180  
 AAAGAAACGA GGAGTTGGAA TNATAATTGT AGAAGCTGCA TGATAGATAC ACATTCTTA 240  
 TACTTCTGTA TATGTNGAAA TTTTNATCA AATTATAATN GTGTATAATG ACTAATTATG 300  
 CTTNCATTGT CTATCCTGTG TGGTTATGTA ACTTGCTGAA ATNNATACAT AANGGGTCTT 360  
 CAACCTTNAN NTGGTCTTAT CCANGGCATA NN 392

SEQ ID NO:2628

LENGTH:385

TYPE:nucleic acid

2153480

TOPOLOGY:linear

CLONE:HUMGS03064

SEQUENCE DESCRIPTION:

GATCTGTAAT NATCTCTATT GGCTGGGT GCCTGTGCTA TAAATAAGTT TCTTCACATG 60  
AAAAACACAG CCAGCCAAG ATNACTTATC TGGGTTAGG ATTCAATAGT ATTCACTAAC 120  
TGCTTATNAC ATGAGCAATT TCATCAAATC TCCAAACTCT TAAAGNATGC TTTCGGAAAA 180  
CACGCTGTAT ACCTAGATGA TGACTAAATG CAAAATCCTT GGGCTTGTT 240  
TAAGGATTAA AATAACTGC CGACTTCAAA AGTGTCTTA AAACGAAAGA TAATGTTAAG 300  
AAAAATTGAA AAGCTTGGA AAACCAAATT TGTAATATCA TTGTATTTT NATTAAAAGT 360  
TTTGTAAATAA ATTTCTAAAT TTAAA 385

SEQ ID NO:2629

LENGTH:385

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03065

SEQUENCE DESCRIPTION:

GATCGGGGCC CTGGGCTGT NAGACCCGA CCNTCTCGAG GAACCCCTGCC TGAAACGCC 60  
CCATTACAC TGCGCAGTGA GATGAGGGGA CTCACAGTTG CCAAGAGGGG TCTTGCCGT 120  
GGGNNGGNTC GCCAGCCACT CACCAGCTGC ACTGAGAGGG GAGGTTNGCA CACCCCTCCC 180  
CTGGCCGCT GAGGCCGCG CACCTGTGCC TTAATCTTCC CTCCCCCTGTG CTGCCCAGC 240  
ACCTNCCCCG CCCCTTACT CCTGGGAACT TTGCAGCTGC CCTTCCCTNC CCGTTTTAA 300  
TGGCCTGCTG AAATATGTGT GTGAAGAATT ATTTATTTTC GNCAAAGCAC ATGTAATAAA 360  
TGCTGCAGNC CNGCCTNTGC CCAA 385

SEQ ID NO:2630

LENGTH:385

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03066

SEQUENCE DESCRIPTION:

GATCCGGGN AGTNACAGGT GCCGACGTGA TGTGCTTCT NTGGTGCCCA GCTCCCTCC 60  
TGGTCTNANA CTAGCTCTGG GGGTGGCGGG GGCCCCACA CGCTGCTCCC GCTCCACCC 120  
GCCCGTNTG CTGCTCTGTG CCTGCTGTCA GAGCCCTGGT GGGGGAGGAT GTGGCCACCC 180  
TGAGACCCGG AGGAGACGGG CGTCTGCCTG GNTTGCAGGA GAGCNGCTTA TGGGTGTGGT 240  
CCGTCCAGAC ACCTTGTTC AAGGGGGATG GGCAGTANNG GCAAGCAGAG CATCCCCACC 300  
GNTGAGCAAG AACTTTTCT TGTTTTAAA CCATCACGTC CTCATTAC AATTGGAATA 360  
AAAGTGAAGTTT TTGGAAACC TGAAA 385

SEQ ID NO:2631

LENGTH:381

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03067

SEQUENCE DESCRIPTION:

00948

2153480

GATCGCAAGG AACTGGGCCG CCTACTACCC CGACCTGCC ACCCCAGAAC AGCAGCAAGA 60  
CATGGCCAG TTCATACATT TATTTCTAA GTTTACCCC TGTAAGGAGT GTGCTGAAGA 120  
CTTAAGAAAA AGGTTGTGCA GGAACCACCC AGACACCCGC ACCCGGGCAT GCTTCACACA 180  
GTGGCTGTGC CCCNTGCACA ATGAAGTGAA CCGCAAGCTG GGCAAGCCTG ACTTCGACTG 240  
CTCAAAAGTG GATGAGCGCT GGCGCGACGG CTGGAAGGAT GGCTCCTGTG ACTAGAGGGT 300  
GGTCAGCCAG AGCTCATGGG ACAGCTAGCC AGGCATGGTT GGATAGGGC AGGGCACTCA 360  
TTAAAGTGCA TCACAGCCAA A 381

SEQ ID NO:2632

LENGTH:370

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03068

SEQUENCE DESCRIPTION:

GATCCGTAAG TCCATGACCA AGGAGGCCAT CCGAGAGCAC CANATGGCCC GCACTGGCGG 60  
CACGAGACAG ACCTGTNCAC CTGCGGCAAG TGCAGGAAAA AGAACTGCAC CTACACACAG 120  
GTGCAGACCC GCAGCTCTGA TGAGCCCATG ACCACCTTN TTGTCTGCAA CGAGTGTGGA 180  
AACCGCTGGA AGTTCTGCTG ACCCCTCGTG TAGATGTGCT GCAGCCTTGG GCCCTCCCCG 240  
GCCCACGTCC TCCGTTGACA CAGCTTCTNT GGAGACCCCTA GAAGGCGGCA TGTCTGCC 300  
TCAACCTGCC TGCNTGGATT GCACCTTCT GCCCTTCCC CNTNATTATT AAATGTTCT 360  
TTTGCCAAA 370

SEQ ID NO:2633

LENGTH:344

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03069

SEQUENCE DESCRIPTION:

GATCTTCTTC AAGCCATTAT TTTAACTCAA GAAAATCTA GAGAAGAAAA GTGAAGAAGT 60  
CATGTTGAAG AAGATGTAAG AATGTGTCAA GACCATCCAG AAATNATATG AGAAATACTG 120  
ATATTTAAA TGGTGCACAT CATCCAGCGA AATGAATCTA CATTAAATGT TGTTTAACT 180  
GCGCTATGAT TAAACCATT CATATAGAT TAGTNTTAC AACTACTATT CTGTTATTT 240  
TTTTTTAACG TGACACATT TGTCTTAAGT AAGATAAGCA AAAAAATTCT TCAACTCCTT 300  
TTGGCAAGAA AACTGTAACA GAAAATAANT TTTGAATGTG TACN 344

SEQ ID NO:2634

LENGTH:341

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03070

SEQUENCE DESCRIPTION:

GATCCCTGGT CCAGAATTCC ATTACCTTC TGGGCCAGAT ACCACCAGAA TGCCCGCTCC 60  
ANATTCCCTC AGACCTTGC CGGTCCATT ATTGGTCTG GTGGTACAGC CAGTGCCAAC 120  
TTCGCTGCCA ACTTTGGTGC CATTGGTTTC TTCTGGGTTG AGTGAGATGT TGGATATTGC 180  
TATCAATCGC AGTAGTCTT CCCCTGTGTG AGGCTGAAGC CTCAGATTCC TTCTAACAC 240

00949

AGCTATCTAG AGAGCCACAT CCTGTTGACT GAAAGTGGCA TGCAAGATAA ATTTATTTGC 300  
 TGTCCTTGG GCTACTGNTT TTTTCCCCT TGTGTGCTGT N 341

SEQ ID NO:2635

LENGTH:340

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03071

SEQUENCE DESCRIPTION:

GATCGNCAAG AAAATTNAGA TTGGCGATGG GGCAGAGCTG ACGGCAGAGT TCCTCTACGA 60  
 CGAGGNGCAC CCCAACCAAC ACGNCTCAA GCAGGCCCTC GCCAAGCCA AGGGCCAGG 120  
 GGGCAAGCGG GGCCATAAGC GCCTCATCCG NGGCCCCGGT GAAAATGGGG ATGACAGCTA 180  
 GGAGGGCTGGA GCATNNNGNCG GCCACGTNTG GACTGTGGGG CTGCCACCT TCCGCTCCCT 240  
 GCCACCACATCC TCCTTCCTGG GCTCCAGGAA AGTNTTTCTG GGAGGTCAAG AGGGCTGGCA 300  
 GCTTGAACGC ACTTGCAGCG TCCGANGNC ACCGGGCTTN 340

SEQ ID NO:2636

LENGTH:335

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03072

SEQUENCE DESCRIPTION:

GATCTGTCTG CNTTCTCAA GACCATTGCA CTGAATGGTG TGGAGGACGT GCGAACCGTG 60  
 CTGGAGCACT ATGCCCTGGA GGATGACCCG CTGGCGGCTT TCAAAACAGCG GCAAAGCCGG 120  
 CTAGAGCAGG AGGAGCAGCA GCGCCTGGCC GAGCTCTCCA AGTCCAACAA GCAGAACCTC 180  
 TTCCCTGGCT CCCTCACCAG CCCGTTGTGG CCTCGCTCCA AACAGCCCTG AACTCTGGGC 240  
 CTCCTCAAAC TCAGTGCCTG GGTCAGGGC CCCAGTGCTT CCAGACCAAG ACTTGGGCA 300  
 CCACTNTCC AATAAAGTAC ATCCGAGACG GCAAA 335

SEQ ID NO:2637

LENGTH:332

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03073

SEQUENCE DESCRIPTION:

GATCCAGTTG TGAACAAAGA GTCCCTTNG TGGAAAAGAA AAAAATACAT NTCCCTTAA 60  
 ACGGTGGATT GAAAATAACT TTNATTATA AAGAGAAGAC TGAGGGCGGG GATACTGATT 120  
 CANNAATCCT GTAGCGTGT AAAAAAGAAG AGGAATGGC ATGGAATCAC TGCCCTCTGT 180  
 GATTTGAAGG CCATTGTGAA GGAAAACAAT GCACTGAAAG AAAGTTCTTC ATATTAGGCC 240  
 AGATATCATT GCATCACATT TATTATCTT TCTGGNATT TTATAGCCCT TAATAAAAAA 300  
 TATTAATAA GAATGCTTA TTGTGTCTTA AA 332

SEQ ID NO:2638

LENGTH:335

TYPE:nucleic acid

2153480

TOPOLOGY: linear

CLONE:HUMGS03074

SEQUENCE DESCRIPTION:

GATCAAGAAT TTGGTGTGGA CGTTGGCCCT GTTGCTTT TATAAACCAA ACTCTATCTG 60  
AAATCCCAAC AAAAAAAATT TAACTCCATA TGTGTTCCCTC TTGTTCTAAT CTTGTCAACC 120  
AGTGCAAGTG ACCGACAAAAA TTCCAGTTAT TTATTTCAA AATGTTGGA AACAGTATAA 180  
TTTGACAAAG AAAAATGATA CTTCTCTTT TTNGCTGTTC CACCAANTAC AATTCAAATG 240  
CTTTTNGTT TATTTTTT ACCAATTCCA ATTCAAAAT GTCTCAATGG GGCTATAATA 300  
AATAAACTTT CAACACTCTT TTATGGTNAA CCAAA 335

SEQ ID NO:2639

LENGTH:384

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03075

SEQUENCE DESCRIPTION:

GATCAAGCCT GCCTCAATCA GTATTCATAT TTATAGCCAG GTACCTTCTC ACCTGTNAGA 60  
CCAAATTNAG CTAGGGGGGT CAGGCCAGCCC TCTTCTGACA CTAAAACACC TCAGCTGCCT 120  
CCCCAGCTCT ATCCCAACCT CTCCCAACTA TAAAACTAGG TGCTGCAGCC CCTGGGACCA 180  
GGCACCCCCCA GAATGACCTG GCCGCAGTGA GGCGGATTGA GAAGGGAGCTC CCAGGNGGG 240  
CTTCTGGAA GACTCTGGTC AAGAAGCATC GTGTCTGGCG TTGTGGGAT GAACTTTTG 300  
TTTTGTTCT TCCTTTTTA GTCTTCAAA GATAGGGAGG GNAGGGGGGA ACCATGAGCC 360  
TTTGTGGCT AATCANTCCC AAGN 384

SEQ ID NO:2640

LENGTH:352

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03077

SEQUENCE DESCRIPTION:

GATCAAAGGT TTAAAGTCTA ACTTCTAAGA TATATTGCA GAAAGAACCA ACATGACAAT 60  
AGAGAGAGTT ATGCTACAAT NATTCTTGG TTTCCACTTG CAATGGTTAA TTAAGTCCAA 120  
AAACAGCTGT CAGAACCTCG AGAGCAGANC ATGAGAAACT CAGAGCTTG GACCGAAAGC 180  
AGAAAGTTG CCAGGNAAAA AANNGGCATC ATTATTACCA TCGATTCACT GCCTGGTTAA 240  
NGNGGNAAGC TTACTTNGTT TNAGTGGCAG CCNCNTNGCA CGTGGTTGC TATGNAGGTG 300  
AANGTTTCC. CAATTCTTC AGGCTTTTN GGGGGTTTC GGGCTCTNCC TN 352

SEQ ID NO:2641

LENGTH:321

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03078

SEQUENCE DESCRIPTION:

GATCAAACAG CTCTAAGTAT GAAGCAAGAG TAAAGACTAA GGTTTCGAGA NCATTCCTAC 60  
TCACATAAGT GAAGAAATCT GTCAGATAGG AATCTAAATA TTTATAGTGA GATTGTGAAA 120

00951

2153480

GCAACCTTAA AGTTTGAG AAGACTGATG AGACTAGGTG CNNNGCTTCC TTTCATCAGG 180  
TATCTTCTG TGGCATTTGA GAACAGAAC CAAGAACAT GGTAATTNCT AANTTATGAG 240  
GCTTGCTT TTGTTGCTT TTAAGTAGAA ACCATGTTG GCAACATTGA GTTTGGNGT 300  
TGATTGAGAT AATATGNCTT N 321

SEQ ID NO:2642

LENGTH:320

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03079

SEQUENCE DESCRIPTION:

GATCTTGCG TGGAAAACA GAATTTATAG CAGTTTATTA ATGATACCTT AAATNACTCA 60  
GGACTTAATG TAGCATTGCA CTTCTGTGTA CAGTAAAAC GCTTTGTTT ACTAAAGAGA 120  
AAAATGTGAG TGGAAAAAAAT ATGTATGTGT TATATACTCA AATGTATATA ATNCTATCTA 180  
TAGATTTATA TATGTATACA TTCTGTACAG TAGTTCCATC AAAATATGTA ATAATTACAA 240  
CCAATTTAT TAAATGTATT TNCTTTTCA AAATTTAAAT TGAGCTGCTA TCAATATTAA 300  
ATGAAGTTAT GGCATCTAAA 320

SEQ ID NO:2643

LENGTH:303

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03080

SEQUENCE DESCRIPTION:

GATCCCTTCG ATGTGGATTG AGGGAGAGAG TTTGGAAACC CCAACAGGCC TGTGGCATGC 60  
ACCCGGCTGC CCTCGGACAC TGATGACAGT GATGCGTCTG AGGACCCAGG GCCTGGCGCC 120  
GAGCGCGGAG GAGCCAGCAG CAGCTGCTGT GAAGAGGAGC AGACGCAGGG ACGGGGGGCT 180  
GAGGCCAGGG CCCCGGCTGA GGTTGGAAA GGAATCAAGA AACGGCAGAG AGACTNAGGG 240  
TTGCAGACAC ATATATTTT GAGGCTGGGT GACGAGAAAA TCTAGAGACA TGAGGGACAT 300  
AAA 303

SEQ ID NO:2644

LENGTH:315

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03081

SEQUENCE DESCRIPTION:

GATCCAGACG CAAGANGGCT GTCCCTCTCA AGGAATATGG TTTTTNCTT CTAACGGTG 60  
CTGCCAGCTT TATAATGGTG GCCCACCTAG CCATCANTGT TTCCAAGGCC CGCAAGANGT 120  
ACAAAGTGGA GTATCCTATC ATGTACAGCA CGGACCCCTGA AAATGGGCAC ATCTTCAACT 180  
GCATTTCAGCG AGCCCACCAAG AACACGTTGG AAGTGTATCC TCCCTCTNA TTTTNCTAG 240  
CTGTTGGAGG TGTTTACAC CCGCNTATAG CTTCTGGCCT GGGCTTGGCC TGGATTGTTT 300  
GGACGAGTTC TTTAN 315

SEQ ID NO:2645

00952

LENGTH:314

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03082

## SEQUENCE DESCRIPTION:

GATCCTTCTT GGCCCCAGAA AGTCATTGG CATGGCTCCA GCCCCATGG CATCCGCTTN 60  
 TGGATAACTA CTGTGAAGCA TGGCGAACCG CGGACACAGC GGTACGGGA CTTGCCTCCC 120  
 CGCTGAGCAC GGGGAAGATT CTGGACCAGA AAGCATACAG CTGTGCTAAT CGGGCTAATT 180  
 GTCCTATGTA TCGAAAACAG TTTCATGNCA GNCGTTAGGA AGTAATTGGC TTCTTNATGA 240  
 TTCTTAAAN GNGTTCAA TTTTCCTAA TGNGAAGNGT TGNCAGTGA ATCTAAAATG 300  
 TTTANTTG TG NAAA

314

SEQ ID NO:2646

LENGTH:310

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03083

## SEQUENCE DESCRIPTION:

GATCACTGTG GACAGGGTGC AGCTCTACCA GTTCTGTTT CTNCTGAGCC AGACCCCTTT 60  
 CAGGGAAAGGG ACCAATTAAT TTTAAACTC ACTTGAAGCA CAGCTGGTCA TGGGCTTGG 120  
 TATAAAGTTC CTATTCCAC CCTGATAACTT CCAATTCTG GAACCCCAGC CCACTCCNCC 180  
 ATCCCTCCTC CCTATCAAAC TAGTATAATG ATTTGAATC GGTACAGTGT GTTTAAGTGT 240  
 AACTAAGTTC GACAGACTAT TATTATCTTT GTAATAAAATT AACCTAGCAA TAAAAATTAT 300  
 TCTGTNTAAA

310

SEQ ID NO:2647

LENGTH:308

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03084

## SEQUENCE DESCRIPTION:

GATCTATCAA GCTTGANACA TTANGNTCA TCACGCCTG AAGACAGGAA GCAGTTCACT 60  
 GAGTCAGCTG GTTCCAAGC TCCACAGAA GGTGATAAGT TACTATCAA TGCCAGTNAG 120  
 AATCTNCTTA TAGAATAACC TGGGCCAAG TNATTTNGT ACAAAACTTG CCCTTCTTGT 180  
 GTTTAATTN CTATGTGCTT TTAGGTGTGA ATCCAGATAT GCGGTCTTAA TTCCTTGGA 240  
 AATACACAGT TCGTTAGTT ACTGTACACT CTGTTGTTC AATAAACTGC ATATCANTT 300  
 CCNACAAA

308

SEQ ID NO:2648

LENGTH:302

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03085

## SEQUENCE DESCRIPTION:

GATCAGCAGC CCCTGAGCGG AGAAGAGGAG CTAGAGCCTG AGGCCAGTGA TGGTCAGGC 60

2153480

TCCTGGGAAG ATGCAGCTT GCTGACGGAG GCCAACCTGC CTGCTCTGC TCCTGCTTCT 120  
GCTTCTGCC CTGTCTAGA GACTCTGGC AGCTCTGAAC CTGCTGGGG TGCTCTCCGA 180  
CAGCGCCCCA CCTGCTCTAG TTCTGAAGA AAAGGGGCAG ACTCCTCACA TTCCAGCACT 240  
TTCCCACCTG ACTCCTCTCC CCTCGTTTT CCTTCAATAA ACTATTTGT GTCAAGCTTCA 300  
AA 302

SEQ ID NO:2649

LENGTH:302

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03086

SEQUENCE DESCRIPTION:

GATCAGCGAG CTACCANGAC CAGAGACCAA CTCAGCTAC AGCAGAAGNA TTTCCCAAG 60  
CCTGCTGACC ACAGTCACAT CACCCATCAAG CACATGGAAG GCCCCTGGTA TGGACACTGA 120  
AAGGAAGGGC TGGTCTGCC CCTTGAGGG GGTGCAAACA TGACTGGGAC CTAAGAGCCA 180  
GAGGCTGTGT AGAGGCTCT GCTCCACCTG CCAGTCTCGT AAGANATGGG GTTGCTGCAG 240  
TGTTGGAGTA GGGGCAGAGG GAGGGAGCCA AGGTCACTCC AATAAAACAA GCTCATGGCA 300  
AA 302

SEQ ID NO:2650

LENGTH:303

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03087

SEQUENCE DESCRIPTION:

GATCCCAGCT GATGTAGACC CTCTCACCAT TACTTCATCC CTGTNATCTG ATGGGGTCCT 60  
CACTGTGAAT GGACCAAGGA AACAGGTCTN TGGCCCTGAG CGCACCATTC CCATCACCCG 120  
TGAAGAGAAG CCTGCTGTCA CGCGAGCCCC CAAGAAATAG ATGCCCTTTC TTGAATTGCA 180  
TTTTTTAAAAA CAAGAAAGTT TCCCCACCAAG TGAATGAAAG TTTTGTGACT AGTGTGAAG 240  
CTTATTAAATG CTAAGGGCAG GCCCAAATTA TCAAGCTAAT AAANTATCAT TCAGCAACAG 300  
AAA 303

SEQ ID NO:2651

LENGTH:296

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03088

SEQUENCE DESCRIPTION:

GATCTCAGCT GGAAGTTCTG TTTGGAGCCC ATTCTGTNA GACCCTGTAT TTCAAATNTG 60  
CAGCTGAAAG GTGCTTGTAC CTCTAATTTC ACCCCANAGT TGGAGTTCTG CTCAGGAAC 120  
GTGTGTAAATG TGTACATCTG TGTCATGTG TGACCATGTG TCTGTNAGGC AGGGAACATG 180  
TATTCTCTGC ATGCATGTAT GTAGGTGCCT GGGGAGTGTG TGTGGGTCTT TGGCTCTGG 240  
CCTTCCCCCT TGCAGGGTT GTGCAGGTGT GAATAAAAGAG AATAAGGAAG TTCAA 296

SEQ ID NO:2652

00954

LENGTH:291

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03089

## SEQUENCE DESCRIPTION:

GATCTNACGG CCAGGCCTCT NTCTGCTGC TGTTTTAAT TTTCCAGGT AGTGGGAGAG 60  
 AGGAAAGGAG GGAAGCAG ATTCTTCCC CCTCCCTGCT GAAGCATGTG GTACAGAGGC 120  
 AAGAGCAGAG CCTGAGAACG GTCAAGTCCC ACTTCTGCCA TGCACTACT ATGAGCCCTC 180  
 GGGGCCTCT CCTGGCCTC AGCTTGCCA GATACATACC TAAATATATA TATATATATA 240  
 TGAGGGAGAA CGTNTCACCC AGNTTNATC ATGCTGGAAA GAGTGTATGT N 291

SEQ ID NO:2653

LENGTH:290

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03090

## SEQUENCE DESCRIPTION:

GATCTAAAGG GTGTAAAAAT ATTGATACTT CAATATTCA CTTGCTGCCA GGAAAAACAA 60  
 AATTCTCAAT CTTTTGTAAT TGGGAGGAGG ACTTTTGAT ACATTTTAC TCTTTAAATA 120  
 ACGACAACGA CACTTATACT GTCATAATAA CAATNATGTA TTTCTTGATG GTTTAAATT 180  
 TTTTGTAAT TTTACATAAA ACAGTTATTT TCTATTTNA CGCAGATAAA TATTTGTGCA 240  
 TAAAATGTA AAATAGTAA ATGAGAAAAA TAAAACATTAT ATACAGTAA 290

SEQ ID NO:2654

LENGTH:287

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03091

## SEQUENCE DESCRIPTION:

GATCTGCTCTGGA CCCAATTCCC CTTACTTCAT TTTGGCAAAC ACTAAGTCAA 60  
 ATAGTGAAT GCCTGTCAT ACATAGAAC TATTACCTGG GGCAAATACG AACAGATTGA 120  
 GTTTCCTTCA TCTTGTGTAAT ATATGATGAA ACAGAGACCT GGTAACTTGG TGACACTGTT 180  
 AAACCTTT NGGGATAAAAG CCAAATGTAATGGAAACAT TAAACAGATA ANTTGTGGTG 240  
 TTGAGACTTT TCTGAATTGA GAAAAATAAA TGTAATTTG GAAGAAA 287

SEQ ID NO:2655

LENGTH:287

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03092

## SEQUENCE DESCRIPTION:

GATCTGACCG GCTTCAAGCT CAAGCCCTAC GTGAGCTACC TCGCCCCCTNA NGAGCGAGGA 60  
 GACGCCCTG ACGGCCGCGC ACTCTTTCAG CGAANCNGTG CGCCCTGCCA TCGAAAAGNA 120  
 CTTCAAGGAC GGTACCTTCG ACCCTGACAA CCTGGAAAAG TACGGCTTCG AGCCCACACA 180  
 GGAGGGAAAG CTCTTCCAGC TCTACCCCCAG GAACTTCTG CGCTANTGGG CGGGGGAGGG 240

GCGGCCTGCC CTCATCTCAT TTCTATTAAA CGNCTTGCC AGCTAAA

287

SEQ ID NO:2656

LENGTH:341

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03094

## SEQUENCE DESCRIPTION:

GATCGTGGAG GAGGGACAAC GCTGCCACCG NTCGNCTGC AACACGTGCC CCTACGTGCA 60  
 CAACATCACC CGCAAGGTA ACAAATCGAA GTACCCAAAA CTGAAAGAAG TGGATGATGT 120  
 GCTTGGTGGGA GCAGCTGCCT GGGAGANTGT TGACTCTACT GCAGAGTCGT GTCCCAAATG 180  
 CGAACATCCT CGTGCTTACT TCATGCAGCT TCAGACCCGC TCTGCAGATG AGCCGATGAC 240  
 CACCTTCTAC AAGTGCTGCA ATGCTCAGTG TGGACACCGC TGGNGGGATT NGGGNCAGGT 300  
 NTGGCCCAGC TGCCCTNGTG TGTGCTTGCC TTGTNCCTCN N 341

SEQ ID NO:2657

LENGTH:279

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03095

## SEQUENCE DESCRIPTION:

GATCCACAAG GTTGTCTGCT AAACCTGCTC CTCCAAAGCC ACAGCCCAAG CCTAAAAAGG 60  
 CCCCTGCAAA GAAGGGAGAG AAGATAACCA AAGGGAAAAA GGGAAAAGCT GATGCTGGCA 120  
 AGGAGGGGAA TAACCTGCA GAAAATGGAG ATGCCAAAAC AGACCAGGCA CAGAAAGCTG 180  
 AAGGTGCTGG AGTTCCAAG TGAAGTGTGT GCATTTTGTA TAACTGTGTA CTTCTGGTGA 240  
 CTGTACAATT TCAAATACTA TTTTTATCA AGTTTTAAA 279

SEQ ID NO:2658

LENGTH:279

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03096

## SEQUENCE DESCRIPTION:

GATCTGAATG TNCAAGTTCA GCCAAGGTAG ATTTTACTTT CAACTTTTA ATCAGTATCA 60  
 CTTTCTGTGC TTAACTATTT GGTGTTACCT TGTCTGTTT CATTGCTCA AAATNCTGTA 120  
 GAGATGACTA AAATTGACA TAATGGGTGA AATGGATTGT NAAGGTAAC TTCAAGTTGAN 180  
 GATTAANGCA AGANGCCATT TTCCCCATGA CTTTGGTTTT GTTTACATTT TNCCCTTTCA 240  
 GTTACTATAC ACTACACGTA CTGTAATAAA GTNCAATAN 279

SEQ ID NO:2659

LENGTH:274

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03097

## SEQUENCE DESCRIPTION:

2153480

GATCTTNTAAAGCAAGGCCTTGAGCAAGTAGGTTGCTGTCTCTAACGCCCCCTCCCTT 60  
CCACTATNAGCTGCTGGCAGTGGGTTNTA TCGGTTCCCAGGGGTTGAGAGCATGCCTG 120  
TGGGAGTCATGGACATGAAGGGATGCTGCAATGTAGGAAGGAGAGCTTTGTGAATGTA 180  
AGGTGTTGCTAAATATGTTATTGTGGAAAGATGAATGCAA TAGTAGGACTGCTGACATTT 240  
TGCAGAAAATACATTTATTAAAATCTCC TAAA 274

SEQ ID NO:2660

LENGTH:259

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03098

SEQUENCE DESCRIPTION:

GATCTGCCTG CNTTGGCCTCCAAGGTGCTGGGATTACAG GTGTGAGCCA CCACCCCCAG 60  
CCGCCTCTAT GCTTTGGNTCTTTGATAT ATCTAAACTAAAGTCAGAA CAGAAATTCA 120  
TGTGCTGAAC AGAATGGATTCTTTGCAGTACCAATCCA ATTGAATCCTCTTTTATT 180  
TCCTGCGTCC TTACCAAGTCACTTGATAGT GCTAACTAACCTACACTATGGGGTTATTC 240  
ATGANTTAAG TATGATAAA 259

SEQ ID NO:2661

LENGTH:272

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03099

SEQUENCE DESCRIPTION:

GATCTGTGTTTGTAATACTGTTGTAATTAATTTTTAA TTCATGAACNAGCGGAAAAT 60  
TTATTAATTAACTATTAACCACATTACCTTGTAATGACTGTATAAAA CTNGTNGACA 120  
ATGCACTGACTTAGAAAGATGTAATGTCATAANTNGAGTGTAAATAANATGTTG 180  
ATGTAATGCAATATGACCTGTATAANNNGTATTAGTAATTGTNTATGGGGTGTACCTGTT 240  
TATCTGTAAC TGTNATCCAAACAAATNAAA TN 272

SEQ ID NO:2662

LENGTH:270

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03100

SEQUENCE DESCRIPTION:

GATCTATCTG GNNTGTGCNTAGACTNGATGAGAAGGTGTAACTCTGCA GAAAGTCTCT 60  
CCTTCATCAC TGAATTCACTTGGAGATGACAACTTC AAATGCTAACCCGATGACCC 120  
CAGAAAACCGTGTGAGATTCGTACCGAAGAACCTTGTGGAATCCCTTNC TTAGGCCCCAA 180  
CCTGGTCGATAGCTCGAGAAAGANTNTTNCCAAGGAAATGTCTGGATA TGGGTACTGT 240  
ATTGAAAGCTGTAGCTTTGTCAACACGN 270

SEQ ID NO:2663

LENGTH:268

TYPE:nucleic acid

00957

TOPOLOGY: linear

CLONE:HUMGS03101

SEQUENCE DESCRIPTION:

GATCATGAAT CAAGCCTGG AACAGATGAA GACAAAAGCG GATGAGTGAG TTATATAAAC 60  
 TTACTCCAT TCTGTTCCG ATTAAAGTT TGAGAGACTT GCTAATNAAT CTCCCTTATG 120  
 TTGTTTCCT TTTCATTGTT TTTGGATTGT TTTATGTTG TCCTTTTT TCTTAATGTG 180  
 GATTCATG AGTTGATTT TTGATAATCT GCAATCTGGA TAATTTGTAC TGCTAAAGTT 240  
 TTAATAAACT CGACATGAGA AAAACAAA

268

SEQ ID NO:2664

LENGTH:267

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03102

SEQUENCE DESCRIPTION:

GATCAAATA GTAATAAAC AACAATAAT TTTGATTGA CTGGTGAAT TAGATTACT 60  
 AAATAAAAT GGCTTAAATT TTGACTGTAC TAACTATAAA TGTAATGAAT TATAATAATT 120  
 ATAAATGGTA TAAATGCATT CTACAATGTG ATTATTTCT GTATTTAGT ATATAGTATA 180  
 AAATGGAATT ATTGGGTTAA AGTACTTTA TTACATTCT TAATCCATTG TTTTACCTA 240  
 ATAAAAATTTC CTCCCTCTATA TTCCAAA

267

SEQ ID NO:2665

LENGTH:266

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03103

SEQUENCE DESCRIPTION:

GATCCGAATC TGTGCCAGC GCTAAAGGCT CAGTGTAGC ATGGCTNNN CTGNCCGGTG 60  
 TGCCATATTC TTGTTGGAGA TGAACCGTAG CACCAGAGCC CATTCTCCT TGTCAGTCTT 120  
 GGCCCAAAGA TGTCAACCATT CCTAGTTATT TGTCAACCACA TAATTGGTGT TGATTGGAAA 180  
 CTTTTCTGA GATGGGACAG AACTGCTGGG TTGTCTTTT CCATGTAACT TAAGCATAGT 240  
 AATATAAATA AAGTAATAGT TGGAAA

266

SEQ ID NO:2666

LENGTH:265

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03104

SEQUENCE DESCRIPTION:

GATCCTCCCT GTCATGCCAC ATTCACTGA TTGGAATGTG GAAATGGAAA AGGAATTTAG 60  
 GATGTGCATT TTCACCTGAG GTTCCCTGC ATCCCTGCAG TGCCAAAGCC CCACCTTCAG 120  
 GGACCACCTG GAATGTGTGA GGGGCTGACA GCACAGTAAC GTGCATACAT ATCTGCAGGG 180  
 CTGGAATGGA AGCTTAAAG GTGGTAGTGA TTTTNAATTTT GGAAGAATCA TGTTACCTT 240  
 TTGTTAAATA AAATTTGTAC TCAAA

265

SEQ ID NO:2667

LENGTH:303

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03105

## SEQUENCE DESCRIPTION:

GATCCAGTGT CCATGGAAAC ATTCCCACAT GCCGTGACTC TGGACTATAT CANTATTGG 60  
 AAAGCAGGGT TCCTCTGCCT GCAAACAAGC CCACGTGGAC CAGTCTGAAT GTNTTCCTT 120  
 TNCACTATG TTTTAAGTA GTCAAACATTC AAGAAACAAT CTAACAAAGT TTCTGTTGCA 180  
 TATGTGTTTG TAAACTTGTATTTA GTAGGCTTCT ATATTGCATT TANCTGTTT 240  
 TTGTAACTCC TGATTCTCCC TTNCGGATA CTATTGATGA ATAAAGGANT TAANGTGGAT 300  
 AAA

303

SEQ ID NO:2668

LENGTH:263

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03106

## SEQUENCE DESCRIPTION:

GATCAACCAA GGCAGATGTG ACAGCAAGGG CCACGGACCC CATGGCAGGG GTGGCGTCTT 60  
 CATNAGGGAG GGGCCCAAAG CCCTTGTGGG CGGACCTCCC CTGAGCCTGT CTGAGGGGCC 120  
 AGCCCTTAGT GCATTCAGGC TAAGGCCCCCT GGGCAGGGAT GCCACCNCTG CTCCCTCGGA 180  
 GGACGTGCCCTC ACACCCCTCA CTGGTCCACT GGCTTGAGAC TCACCCCGTC TGCCCAGTAA 240  
 AAGCCTTCT GCAGCAGCTG AAA

263

SEQ ID NO:2669

LENGTH:258

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03108

## SEQUENCE DESCRIPTION:

GATCTGGCCT AGGTCCCCCCC TTTNTNCTGT CCCCTGTNTT TAAGTCGGGA TTTTACAGA 60  
 GGGAGCTGTC TCCAGACAGC TCATCAGGAA CCAAGCAAAG GCCAGATAGC CTGACAGATA 120  
 GGCTAGTGGT ATTGTGTATA TGGGCGGGAC GTGTGTGTCA TTATNATTG AGTTATGCTG 180  
 TTGTTTAGGG GTAAATAACA GTAAATAATT ATAATAATA ATAATAATAN TAATAATAAN 240  
 GGNGCNGACG TTCTTAAA

258

SEQ ID NO:2670

LENGTH:257

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03109

## SEQUENCE DESCRIPTION:

GATCCACCCCG CCTCGGCCTC CCAAAGTGCT GGGATTACAG GCATGAGCCA TCACACCTGG 60  
 TCAACTTCT TTTGATTAGT GTTTTGTGG TATATCTTT TCCATCATGT TACTTTAAAT 120

2153480

ATATCTATAT TATTGTATTT AAAATGTGTT TCTTACAGAC TGCACTAGT TGGGTATAAT 180  
TTTNATCCAG TCTAAAAATA TCTGTCTTT ATTGGNGTT TAGACAATT ATATTAATA 240  
AAATGGNNGA ATTTAAA 257

SEQ ID NO:2671

LENGTH:257

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03110

SEQUENCE DESCRIPTION:

GATCAGATGT NGCTCAGAAA CTTTCATTGT TTACCTAATA ATTTAATATC ACTAGTTCC 60  
TAGTGGGTCA AGCAGATGCA AAANCCAGCT TATTTCCCTCC TATGTNCTCT CAAGCTTATN 120  
GCTTATTTNA AAGTAAAANC CTGAAAAAGG AAAATATTAG GTTGGTGCAA ACGTAATTNC 180  
GGTTTGCCTA TTGTNGAAAT TTGCCGTTTT ATATTGGAGT ACATTCTAA NTAAATGTGG 240  
TTATGTTATA CATCAAA 257

SEQ ID NO:2672

LENGTH:256

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03111

SEQUENCE DESCRIPTION:

GATCAATTAC TGTCCACT TAGAACAAAG CCTGAGTCGG AGAATATTAA TATTTACCA 60  
ATATATGCCT GTTACAAGAG AAGGAAATAT GAGTTATTAA AGTTAACTT TTTTATGTGA 120  
ATTCAGAGTT TATTTATCGA GGGAAATATG TACAAAGAAG CTTCAAATGG AATATTTACC 180  
GACATTCCTT ATACATGACA GACACTNGGC TACATGGGAA GATGATGTTA ATAATAANNT 240  
GATTTTAAN TGAAA 256

SEQ ID NO:2673

LENGTH:256

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03112

SEQUENCE DESCRIPTION:

GATCTGGAGA GGATTAGGGA CGGCCTTGT GGGCACATTN TNNCTCTAGT TTCATGGGTG 60  
GAGATGGCAT CTCCNGTGGT CTGCAGCATG CAAGTAAAGA CACCAGGTGG CACCATTNAT 120  
NAGCTTTCAA TCCCAGGGAG AGGTCCCATC ATGTAACATNC CAAGAGGTG AAGGAACCAA 180  
CTACCTCTG CATATTGTNG CTAATGGTC TNGCCTCTC CTTCCAGACT TGGGAAATAA 240  
NTTTNAAAAT NGTAAA 256

SEQ ID NO:2674

LENGTH:433

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03115

00960

2153480

SEQUENCE DESCRIPTION:

GATCTACCTT GGTGATTGG ACCCTGGTTG CTTTGTGTCT AGTTTCTAG ACCCTTCATC 60  
TCTTACTTGA TAGACTTACT AATAAAATGT GAAGACTAGA CCAATTGTCA TGCTTGACAC 120  
AACTGCTGTG GCTGGTTGGT GCTTGTAA TGGTAGTAGT TTNCTGTAA CACAGAATAT 180  
AGGATAAGAA ATAAGANTAA AGTACCTTGA CTTTGTTCAC AGCATGTAGG GTGATGAGCA 240  
CTCACAAATTG TNGACTAAAA TGCTGCTTT AAAACATAGG AAAGTACAAT GGTTGAGTGC 300  
AAATCCATAG CACAAGGTAA ATTGAGCTNG TTANGGCAAT CAGGTAAAAT AGTCATGNNT 360  
CTNTGTNATG TAANCCGTA AATGANTGTT CCTGGTTCN CGGTGGTTTT TTNANGGGNC 420  
NCNTTNANNT TTN 433

SEQ ID NO:2675

LENGTH:250

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03116

SEQUENCE DESCRIPTION:

GATCAGAAAGA AAGAAAGACA ACTTTCTCT GCGCGGAACA CTCACACGGA AGGGCTGGCC 60  
GCCCTCCCTGA GCCGGCTGGG AGTNGACGAC AGGACCTACC TCCCCAGAGC AAGGGCCTGG 120  
GGCTTCCCGC CAAAGCTGCC GCGGAACCCC GCTAGTGCAG CCACCCCTCCC TCCGTCGGTA 180  
TGTCCCTGCTT TCCAGCTGAA CCCAAACTAC AAGTGGTTT AAAAAATAA ACACCACAC 240  
CAAAAACAAA 250

SEQ ID NO:2676

LENGTH:247

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03117

SEQUENCE DESCRIPTION:

GATCTGAAAA AGATGGTCAT TCCGGACTCC TGACGCCGCC AGTCCCGCGG TGAGACGTGA 60  
GCNCATTGG GTCCAGTGGC CTCTNTTCC GTGGCAACCT AGTAACCATT AATTTNAAT 120  
TAAAGGAGAC AAAAGCTCG ATGACAGCTC CAGGTCTGCT GAAGATGTCA AGAATCTGTA 180  
TTAATATACA GCAAGAGAGC ATAATTGTNT GTCCATCTTC CAGAGCAGCG AAAATGGAG 240  
GGATAAN 247

SEQ ID NO:2677

LENGTH:245

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03118

SEQUENCE DESCRIPTION:

GATCAAAACC ATCCTGGCCA AAATGGTGA CCCTGTCTCT ACTAAAAATA CAAAATTAG 60  
CTGGGCATAG TGGCACCGCGC CTGCAGTCCC AGCTACTCAG GAAGCTGAGG CAGGAGAAC 120  
GCTTGAACCC AGGAGGCAGA GGTTGCTGTG AGCCGAGATT GCACCACTGC ACTCCAGCCT 180  
GGGCAACAGA GTGAGACTCC ATCTGAAAAA AAAAANTNC AGGCNTGCAA GNTTGGCGTA 240  
ATCAN 245

00961

2153480

SEQ ID NO:2678

LENGTH:347

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03119

SEQUENCE DESCRIPTION:

GATCAGCAGG GCTACCACAT CACTCTTCTG TAATTCACA ACATTCTAAA GGAAGTAAAT 60  
CACCAAGATTT GCTGTATGAT CAGGGTCCAC CAGACACTGC AGAAATAATA AAAACATTAC 120  
CTCAGNAATA CAGNAGGAAA CTTGTGTCTC AAGAAGAAAAT GGAATTATC CAACGTGGAG 180  
GTCCTGAATA ACCATGGTGG CTGCTGTTG TCATCAGACA NTAGAATTTGT CTTTACAATA 240  
AAGGNCTTCC AAAATGGCAG ATGNGAAACT GTATATTAAA CACCTTAGT AANTANTATG 300  
GANNAAGTGN NATNTAGGN ATTAGGTGG TCCCTNGGAT TNCCGNN 347

SEQ ID NO:2679

LENGTH:242

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03120

SEQUENCE DESCRIPTION:

GATCTGGCCT GGAGAGGCCA TCCTATACCC CTTATTAGAG CCATGACAGC CTACAGAGTG 60  
AGGTGAGGTG CTCCCACCTT CCCAGATGGT TCCTTCTGC CCCTTCCTGG AAGGAAAGGT 120  
GAGGCTGCCA ATAGCCTCCT GGACCCAGCC AGACCTCAC CTTGACCAAC CTCTCGGGGC 180  
TGGGGGTCA TTCCTGGGCT ACTGTGGCCT GGTTTGCTT TGAAACCAAG AAAGAGCAAA 240  
GN 242

SEQ ID NO:2680

LENGTH:411

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03121

SEQUENCE DESCRIPTION:

GATCCCCAAC AATGTGAAAA CGGCTGTCTG TNACATCCCA CCTCGGGGGC TAAAATNTC 60  
CGNCACCTTC ATTGGCAACA GCACGGCCAT CCAGGAGCTG TTCAAGCGCA TCTCCGAGCA 120  
GTTACCGGCC ATGTTCCGGC GNAAGGCCTT CCTGCAGTGG TACACGGGGC AGGGNATGGA 180  
CGAGATGGAG TTCACCGAGG CCGAGAGCAN CATGAATGAC CTGGTGTCCG AGTACCAAGCA 240  
GTACCAGGAT GCCACAGCCG AGNAGGAGGG CGAGTTCGAG GAGGAGGCTT AGGAGGAGGT 300  
TGGCCTAGAG CCTTCAANTC ACTGGGGAAA AGCAGGGGAA GCAGTGTNGA ACTCTTTAT 360  
TCACCTCCNA GNCTGGTCCN NGTNGGNCTN GTTCCCAC TGTCGAATTG N 411

SEQ ID NO:2681

LENGTH:240

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03122

00962

2153480

SEQUENCE DESCRIPTION:

GATCTGCCA CGGTGCACAG CCCACCAGAG CACTACAGCC TTTTATTGAG TGGGGTGGGG 60  
CAAGTGTGG GCTGTGGTCG TGCCCTGACA GCATCTTCCC CAGGCAGCGG CTCTGTGGAG 120  
GAGGCCATAC TCCCCTAGTT GGCCACTGGG GCCACCACCC TGACCACAC TGTGCCCTC 180  
ATTGTTACTA CCTTGTGAGA TAAAAACTGA TTAAACCTTT GTGGCTGTGG TTGGCTGAAA 240

SEQ ID NO:2682

LENGTH:237

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03123

SEQUENCE DESCRIPTION:

GATCACCTGG GGACAGAGGT GAAAGGCCTG CTGGGCCTGC TGGAGGAGCT GGCCTGGAAC 60  
CTGCCCCCGG GACCCCTTCAG CCCCCGCTCCC GACCTTNTCG GAGATGGCTT CTNAGCCCTG 120  
GAGCTGGAGC CCAGCAGTTG GAGGTGGTGC ACCTGCCAGG CAGCGCCAC AGAACCAGCC 180  
CTGTCCCTCTC GACTTCCTTC CTTAGCTTCA TGTGAAATAA AAGCTATTCT GGTCAA 237

SEQ ID NO:2683

LENGTH:236

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03124

SEQUENCE DESCRIPTION:

GATCGGCATG GTCATTCAAC AAGTGGAAAGC CAAACCCCTCT GTGTATTCA TCAAGTTGA 60  
TGATGATTTC CATATCTATG TCTACGATTT GGTGAAAAAG TCCTAACTGT TAGGGTAAAA 120  
TTTGGCACAT GTGTGGAAAC AAATGTATAA TTTGTAGACA TGCAAAAAAT GTGCCCTTC 180  
AGTGTATTGA AAGCTTATGG AATCCCTGAT AACTAAACAT CTTGCCAGC ATTAAA 236

SEQ ID NO:2684

LENGTH:236

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03125

SEQUENCE DESCRIPTION:

GATCACACAT ATCCCTCTG AGANGAGCAG TGACTAAAAT GGAATATCTT TTTAAGANCA 60  
GCTCCTCTT AACAAAAAACTTAAAGAC AAATGTGAGA TGGGCTTAGA GTTAGTNCTC 120  
TGGGAACTTG AAAGACATTT ATGCCATATT ATTTATNCAC GTGTTGTNC CTGGTGGGCA 180  
AGATGCCATC TGAGGCTTCA GATGAGAAAT TGGGTAANN TGGAAATTT NCACTN 236

SEQ ID NO:2685

LENGTH:234

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03126

SEQUENCE DESCRIPTION:

00963

2153480

GATCAATCCC TCAAGATTGAAATCCTGA AGAAATTGAG AAGTATGTTG CTGAAATTGA 60  
AAANGAAAAA GAAGAAAACG AAAAGAAGAA ACAAAAGAAA GCATCATGAT GAATAAAATG 120  
TCTTGCTTG TAATTTTAA ATCATATCA ATCATGGATG AGTCTCGATG TGTAGGCCTT 180  
TCCATTCCAT TTATTACAC TGAGTGTCCCT ACAATAAACT TCCGTATTT TAAA 234

SEQ ID NO:2686

LENGTH:230

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03127

SEQUENCE DESCRIPTION:

GATCTAGGCC TGGCAAGANC TCTGGCCCCA AGGCCTCCTC TTCCCAGGGG CTGCCAAGTC 60  
CTGGCCCTGG CCCTGGCATA TNACCCCGNA CTGTGGGGCC AGTCACCACT AGCCTGGCTC 120  
AAATATTCCC CAGGGAGACT NCTGTGTGCT GCCCCGGCTNC CTGCTGGCTC TCCCCCAGNC 180  
CCACATCCCN TCTNGAAGAG AATGTAAAAT AAACCTGGAC ACAAGGGAAA 230

SEQ ID NO:2687

LENGTH:232

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03128

SEQUENCE DESCRIPTION:

GATCCATGAG GTCTAGCCC CTGGCTGCCT GGATGCNTTC CCCCTGCTCT CAGCATATNT 60  
GGGGCGCCTC ANTGCCCGC CCAAGCTCAA GCCCTTCCTG GCCTCCCCCTG AGTACGTNAA 120  
CCTCCCCATC AATGGCAACG GGAAACAGTG AGGGTTGGGG GGACTCTNAG CGGGAGGCAG 180  
AGTTTGCTTT CCTTCTCCA GGACCANTAA AATTNTAAG NGAGNTACTA AA 232

SEQ ID NO:2688

LENGTH:229

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03129

SEQUENCE DESCRIPTION:

GATCACAAAA TGTNATAAAA CTTAAATGT ATAAAACCTT ATCAAATAAA GTTTTATTTT 60  
CCCCTTAAA ATGTATTTNT TTAGAGGCAT TACTTTTTA AAAATATTGG TCAATTNCNG 120  
ACATAAGATG TGAGGTTCAC AGTTGTATTC CAGTATTCAA GATAGATTCC TGATTTCCA 180  
ATTAGGAAAA GTAAAATCCA AAATGTTAGC AAAACAAAGT GCAATATTN 229

SEQ ID NO:2689

LENGTH:223

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03131

SEQUENCE DESCRIPTION:

GATCCCATGC CCAGGTGTCC AGCAGACCTC AAGGCAGAAG GGTACCTAA CCCAGGAGTC 60

00964

2153480

CACAGACTGA TGTGACCTCA GGTTCCCACA TCANTGGCCA CAGGGCAGGG CCCACCTGGT 120  
AGAAGTTTC TGGATATGGC CAGGGTGGGT GTNTGGCTAA NTGGGCCTGA ACAGAGGGAA 180  
CCTAGGGCCC TTGGCCAATG TGATTAAGC TGCCATCTG AAA 223

SEQ ID NO:2690

LENGTH:222

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03132

SEQUENCE DESCRIPTION:

GATCCGCCCT GGAGAACGTGA GTGGCTGAGA CCCGGGTGGG GCCCTCCTAA CCTTGGNTCT 60  
GGGGGCTTCC NTTCTGGTC TTGTCCGGGA TATGGCCTTC CTGAAGGTCT TACCTCCCCC 120  
AGCCGCCCTG CACTTGACCA CCAAAGCAAT CTCTAAGCTT ATAAAGGAGA AACATGTATA 180  
TATGGGGTTT TTTGGAGTAA AGGAAAATTC TAAGATATTA AA 222

SEQ ID NO:2691

LENGTH:222

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03133

SEQUENCE DESCRIPTION:

GATCCACCTG CCTTGGCCTT CCAAGGTGT GGAATTACAG GCGTGAGCAA CCGCGCCTGG 60  
TCTATATGTN ATTCAAATN AGGTGGCCTT ATAAATATAA GCAGATGGGT TTCTGGGCAA 120  
AATCAAATNA TTTCTGTCTC TATTTNNNTG AGTACCAATT GTAAAANCTG AAATTAGGTT 180  
GAGGAAAGTN CTTTAGAAAT AATAAAGATG TACAANTACA AA 222

SEQ ID NO:2692

LENGTH:220

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03134

SEQUENCE DESCRIPTION:

GATCTGCCCA CCTCAGCCTC TTGAGTAGCT GGGACTACAG GTGCATACCA CCACACCTGG 60  
CTAATTTTT AATTINATT TTTATTAAAG ACAAGGTCTC ACTATGCTGC CCAGGTTGGC 120  
CTCCCAAAGT GTGGGATTAA CAAGTGTGAG TCACCGTGCC TGGTCCCATG TACTTGANGT 180  
CATCACTANC AAAATGTATA GATATTGTAT AATGGCAACN 220

SEQ ID NO:2693

LENGTH:219

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03135

SEQUENCE DESCRIPTION:

GATCTTAAT AAAAATTGA TATGAAAAGC ACAATGTGCA GANGTTATGG AAAACCTATA 60  
GAGGATTACA ACAGGTAAC ACAGGTAAC GTTAAAGAGA ATACATTGCT GACTTATAGT GATGTGGCTA 120

00965

2153480

AGANGTACAT GCTTTGTTGT AAAATTNCTT GAAAGCCAT TGAAAGATGT ATCTGTTAT 180  
TTACAGTCTT TGAAGTAAAA GTTACCAATG TTGCCCCA 219

SEQ ID NO:2694

LENGTH:219

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03136

SEQUENCE DESCRIPTION:

GATCTNGCCC CTGCCTCTN GCCTGGGTGA CAGAGCAAGA NTCTATCTNA AAAATGTTT 60  
TAAAAAAATAC TTCTAGGGA AACACACATT TNGCCCTATT TGGAACCTTG AAAAGTGAGC 120  
CCTCCTCTGC CCATGGGCCG TGCTGCTCAG CCTGCCATAC TCGCTTGCTT TGCTGTTGG 180  
NATTGCCTC CAGAATAAAAG GTCCCTTTG TTGTTGAAA 219

SEQ ID NO:2695

LENGTH:224

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03138

SEQUENCE DESCRIPTION:

GATCCTAACAT CCTTCCTCTC CCATTCAACCC TGTGTAACAG NACCCCAAGG ACCTGCCTCC 60  
CCGGAAGTGC CTTAACCTAG AGGGTCGGGG AGGAGGTTGT GTCACTGACT CAGGCTGCTC 120  
CTTCTCTAGT TTCCCTCTC ATCTGACCTT AGTTGCTGC CATNAGTCTA GTGGTTCGT 180  
GGTTTCGTCT ATTATTTAAA AAATATTGAA GANCAAAAAA CAAA 224

SEQ ID NO:2696

LENGTH:216

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03139

SEQUENCE DESCRIPTION:

GATCAAAGTC TTAAGTGTGT TTGAGCTCA AAAATAAAGA TGTATTAAGG AGGGAAAAAC 60  
CTGGTCTAAG TGCAAGGCAC ACTTACAGCG AGTTTACTT TCGGTTGTAT TTCTTTGTA 120  
TATNATAAAC ATTATTTAA CTGTTGCCG TTTGAAGTAA AAAATTCCA AAATGTATGC 180  
TCAACAATAA TCATTAATG GTTTCAGCG TACAAA 216

SEQ ID NO:2697

LENGTH:216

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03140

SEQUENCE DESCRIPTION:

GATCAAATG TGTTAGTAT CACTATCTTC TCTCCTCGTT TCTCTCTAC TCCTCATCCT 60  
CCCAGAACATCT ACCAGTTAT GGTAGAAAGA TGGGAACCTT ATTTGAATGT GTTTTTTTT 120  
TCCATGATGT CCAATTGT NGTGGAAAG GATTTGGATA AAANTTNGT TTAAATTNG 180

00966

GTAGNTTTN ATCTNTACAA NTTTAANTAA AATNAN

216

SEQ ID NO:2698

LENGTH:216

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03141

## SEQUENCE DESCRIPTION:

GATCTCAAAA GTATTCCTCA GGGTAGTCTC CATTCCCTGTC ATTTNCCTC CTATTCATGA 60  
 GACGGAAAAA TTATGACCAT GGTACAGAGT TGTATCAAGG AAATGAAGAA CTAGAACATT 120  
 GAATTGAAAG GTTTGAAAG GGTCACAAT TTCTTTCAT TTNCTATTAA TGCTTCTTT 180  
 TAAATNCTCT TAAGAATAAA ACTTTTTCT AATAAA 216

SEQ ID NO:2699

LENGTH:211

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03142

## SEQUENCE DESCRIPTION:

GATCAGCAAA CAGGAATACG ATGAAGCCGG GCCTTCATT GTCCACCGCA AATNCTCTA 60  
 AAACACTTTC CTGCTCTCT CTGTCTCTAG CACACAATG TGAATGCTCT GTGGAATTAT 120  
 GCCTTCAGTT CTTTCCAAA TCATTCCTAG CCAAAGCTCT GACTCGTTAC CTATGTGTTT 180  
 TTTAATAAAAT CTGAAATAGG CTACTGGTAA A 211

SEQ ID NO:2700

LENGTH:236

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03145

## SEQUENCE DESCRIPTION:

GATCACGAAC ANTACGTTGC GCTCTACTCT GTAGTTATGT GGATTGCCGA GCAATNACCC 60  
 TTTTCATNT CTTATTCTG TGTACTGAG GACCCTAACTC ACTTAGGGAT GTAATTTAT 120  
 AGTATAAACT TTCTGNACAG TTTNCTNAT AGTCTAATAA GTAAAAGTG TCCNNCAAT 180  
 TATGATAATT GCCTATGGTA CATGGATAAN TTAANGCACT GCACACGGTG TAAANN 236

SEQ ID NO:2701

LENGTH:206

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03146

## SEQUENCE DESCRIPTION:

GATCCATTTC TNACACACAC TGCCAGAGAT ACTCTAGGCA TGAAAGCAC AAACATACAT 60  
 ATAAAANCTG CGGGCTTCAA AAAATATAAG TAGGATGTCA TCTATACTGT CATAACTTT 120  
 GTTTTTTATC ACTTACTTAA TGTTATATCT NGGATATTGT ATTACCCCTGG GTATTAAN 180  
 GAACTCCTTT CACATTTAA AATAAA 206

SEQ ID NO:2702

LENGTH:206

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03147

## SEQUENCE DESCRIPTION:

GATCTAAAAC TGGGGTTTGG GGGAGGGTTT CANCCTCTCC CCACTCCNCT TGCCCCACAC 60  
 CCTTACTCC CCAGCCCAGA GAGACGCTGC TTTTACCAAG AAAGACTATT GAAAGATGTT 120  
 TTATATTATT TTNCTCTGAC CTTCCATCC TTGAAAAAAAT GGGGAAAAAA GAAGAAAAAA 180  
 GACAAAATCG ACCATAAAAG ACCAAA 206

SEQ ID NO:2703

LENGTH:205

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03148

## SEQUENCE DESCRIPTION:

GATCTTGTTA ATGCATTTT GATGGGAAGA AAAGGTACAT GTTACAAAG AGGTTTATG 60  
 AAAAGAATAA AAATTGACTT CTGCTTGTA CATATAGGNG CAATACTATT ATATTATGTA 120  
 GTCCGTTAAC ACTACTAAA AGTTTAGGGT TTTCTTTGG TTGTAGAGTG GCCCAGAATT 180  
 GCATTCTGAA TGAATAAAGG TAAAA 205

SEQ ID NO:2704

LENGTH:203

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03149

## SEQUENCE DESCRIPTION:

GATCCTGAGG CTTTGATGCT ATTTNTTAA TCCAGCTGGT CTGTGGAGAA GCCTGGGACA 60  
 GAAAGAAGCA GCCAGACTCC AGAATCCCC ATTAAATAG CTATNNNATG CTATGTCCCC 120  
 GTCTTATTCC TGGCAACTTA CCTCTCAGCT CGTGCAGT GACATTACAG CAAGAAGTAC 180  
 TAATATAAAT GACACAAANG AAA 203

SEQ ID NO:2705

LENGTH:203

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03150

## SEQUENCE DESCRIPTION:

GATCTGAAAA AAATACGGTT GAAAGTGGTG CAGGTAATTA CAATGTGTAG GCAAACCAGA 60  
 AAACCATGGC TTTAACCAAGC AGCTTTGTN AGAAATNATT TCTCCAATGA NTGTAGAAC 120  
 GTTTGCNGCT GAATTGTGAC CTTNCCATT NACCTGCTTT TCCTGCAAAG TATATTNNC 180  
 AGACCCAGGC AGTGCTGTC GCN 203

**2153480**

SEQ ID NO:2706

LENGTH:198

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03151

SEQUENCE DESCRIPTION:

GATCCAATGC TAAACTCCAA TGGTCAGTG ACTGTGGTG CTCTTCTCA AGGCAGCTGA 60  
TACCTGTGCA TACTGCAGGC ATCTAAATTAA GAAGACCTGC GAGTAAAAGT GAAGAAAGAA 120  
GGATATTCTA ATATTTNTNA TATNGTTGTT AATCATCAAG GNATCTNTTC TCGATTAAAA 180  
TNCACACATC TTANGAAA

198

SEQ ID NO:2707

LENGTH:201

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03152

SEQUENCE DESCRIPTION:

GATCCATAAT TCCTATTCAA TGAACATCAT TGTTGGTGGC TGAATACATT TTGGAAGAGA 60  
GTTTTTCATC TTAGAGATTG GTGAACAAGT GTGAGGGTGT GAGAAACTCA CAGAATACAA 120  
ATTTGCCTGT ATGTTTGTG GGTTTTTTT TTCCCTTCA NGATGTTNC TATTNCTAAN 180  
TTAANGTAAT TNCAAGGTAA A

201

SEQ ID NO:2708

LENGTH:196

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03153

SEQUENCE DESCRIPTION:

GATCTATTAG TTTAGTGTGTT ATNAAAGAAT CAAATGTATA GAATTACCAA GCATTCGTGG 60  
GGAATNCTGT GTAGCAAATG TAAAACTNAC CTGCTCGGAA GAAACGTAGG ANCGCTTCAA 120  
ACCCACTGTA ATGTTGGTT TGANNNTATT TCCATTGCTT TNAGAGTGAN CTGCCATAAGN 180  
GTAGGCCTTA TAATAN

196

SEQ ID NO:2709

LENGTH:193

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03154

SEQUENCE DESCRIPTION:

GATCTACAAG NATTTCTTT TAGTAGTTAT ACAAAAGANT ATTACATTAA TTGGTCTGTA 60  
CAGTGTATAA AACCAGCAAT AGGGACAACA ACAAAAGAGAA TCTAAGAAAG ANGACTATGC 120  
CTAANTATAG GGAAAGTTA GAGAACATT TTTAGACAGG ACACATTTG CAGTAGTGAA 180  
TGTGGTAGGT TTN

193

SEQ ID NO:2710

**00969**

2153480

LENGTH: 193

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03155

SEQUENCE DESCRIPTION:

GATCAGTGTT GCAACATANT GNAAAAGATG GCTACTGTGC CTTGTGTTAC TTAATCATAC 60  
AGTAAGNTGA CCTGGAAATG AATGAAACTA TTACTCCTAA GANTTACATT GTATAGCCCC 120  
ACAGATTAAN TTTAATTAAT TANTTCAAAA CATGTTANCC GCNACTTCA TGTACTATGG 180  
AAAAGTACAN GTN 193

SEQ ID NO:2711

LENGTH: 192

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03156

SEQUENCE DESCRIPTION:

GATCTCGAAC CCTGTCTAGA AGGAATGTAT TTGTTGCTAA ATTCGTAGC ACTGTTACA 60  
GTTTCCCTCC ATGTTATTTA TGAATTNTAT ATTCCGTGAA TGTATATNGT CTTGTAATGT 120  
TGCATAATGT TCACTTTTA TAGTGTGTCC TTTATNCTAA ACAGTAANGT GGTTTATTN 180  
CTATCACACA AA 192

SEQ ID NO:2712

LENGTH: 386

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03157

SEQUENCE DESCRIPTION:

GATCCAGAAC NGAGACTGGA CCTTCCAGAC CCTGGTAATG CTGGAAACAG TTCCCTGGAG 60  
TGGAGAGGTT TACACCTGCC AAGTGGAGCA TCCAAGCATG ATGAGCCCTC TNACGGTGCA 120  
ATGGAGTGCA CGGTCTGAAT CTGCACAGAG CAAGATGCTG AGTGGAGTCG GGGGCTTGT 180  
GCTGGGCCTG CTCTNCTTG GNACAGGGCT GTTCATCTAC TTCAGGANTC AGAAAGGNCA 240  
CTCTGGNCTT CAGCCANCAG GACTCTTGN GCTGAAGTGC AGGTGNCCAC GATTCAAGGG 300  
ANGAACCTTC TTGNCCCANG NTTTCAAGA TGGAAAAGCT TTCCCCAAT TTGGNTTCTT 360  
NTTTNTTCCC ACCAAAGAAN CTTNAN 386

SEQ ID NO:2713

LENGTH: 189

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03159

SEQUENCE DESCRIPTION:

GATCTTCCGG AAAAACTAAG CCCCTCCTTC ACCCCCCCAC ACCTGCATCC CTGCCGGAGT 60  
CNTGNTGAGG CACGAACCT GCCTCCCTAG GCCGGACCTT GTGGACGACA GCCCCACCCA 120  
GTCTGTGCTC TCAGCCGCTG GCCGAAGGCC CAGCCTGCTC AGAATAAAGC ATGTCTGCT 180  
GCCGGCAAA 189

00970

2153480

SEQ ID NO:2714

LENGTH:189

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03160

SEQUENCE DESCRIPTION:

GATCCCAGAT TTTACATT TNCCTGTTA TTTGATT TTNCAGTCT TTATTTCTTA 60  
AAGTNCTAGC ACATCTGTNA CTCCCTCACT TCCACATT TNCAGTCTT ACACTTACGT 120  
GCAATCTTAT TCCTNGTCTG CACACACATG TGAAAGCTA GAAATAATG TTAAAACCTNA 180  
CTTTTAAA 189

SEQ ID NO:2715

LENGTH:187

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03162

SEQUENCE DESCRIPTION:

GATCAAATCT CTCCGGCTG TAGTAACCCA GTGGAATGAA TTTGGNCATG CCCAAATGCT 60  
TCTATATGCT AAGTGAAATC TGTGTCTGTA ATTTGTTGGG GGGTGGATAG GGTGGGGTCT 120  
CCATCTACTT TTTGTCAACCA TCATCTGAAA TGGGGAAATA TGTAAATAAA TATATCAGCA 180  
AAGCAAA 187

SEQ ID NO:2716

LENGTH:187

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03163

SEQUENCE DESCRIPTION:

GATCCAAGGG CACAAGGAGA TGAGCAAGGT GTGGAACGAC CTGAGGCCA AGCTCAGCTG 60  
CCTCTTGC GACCACACA GCACCCGTAC CCCACCGTC TCCNNNGNCGG AGGACGGCCT 120  
GTGTCCTCAN TAGGCCCTGA GGCTGNNGTG GTGCTCCCTG CGGNCGCACT AAAACCTCTT 180  
TNCNAAA 187

SEQ ID NO:2717

LENGTH:188

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03164

SEQUENCE DESCRIPTION:

GATCCTCCTG TTTACCCCTGT ACCTCCAATG TCTGGCACTT GTAGGTGCTC AAATATTCGT 60  
TGAATGAATG AAAATCCAT ATTGTAATTG ATGTCCTCTG GCCACATAGT TTTAAATTA 120  
GGTGATTGAT TATATGACCG AATAGAACTA TCAAATGTT TCCTAATAAA GTCAATATTT 180  
CAAACAAA 188

00971

2153480

SEQ ID NO:2718

LENGTH:183

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03166

SEQUENCE DESCRIPTION:

GATCTGCCCT CCTCAGCCTC CCAAAGTGCT GGGNTTACAG GCATGAGCCN TCGCGCCCGG 60  
CCGGATTTTT TTTTTTTTG ATTCAGCTTA TACCAGGGCT GAAAACCTCA NTTTATGTTC 120  
ATGACAGTNG GGATTTTT AAATGCCTAC ATTCTTCTA ATAAACTGTT GGAAGACNTT 180  
AAA 183

SEQ ID NO:2719

LENGTH:182

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03167

SEQUENCE DESCRIPTION:

GATCCAAGTG GCCCAGCAGA AACGGAATTN TNGTNAAAAT GACTGATTCT GGTGCATGTN 60  
AAAGGCTCTG GGGAAATNAAT ACCTGTTGG TCCAAACTTA CTGTATCATATA ATGCTGTATA 120  
TGTNGAAAAC GTAATACCTG TNAATGTCTT AATGAATCAN GTTTGCAGA AAACACCGTA 180  
AA 182

SEQ ID NO:2720

LENGTH:181

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03168

SEQUENCE DESCRIPTION:

GATCCTCCAT TGGAGTGGCC CAATCTTCC TCTAGGGCAA TCCTGAAAGC CCAAGGCCCT 60  
TCNCAGTCTG GCCTTGGCTT CAGCTGGAGA AGGGTAAACAT CAGTCATTGT CAAGGCACCN 120  
CCANCCNGA CAGACCGTGT CTCTGATAAA GGTTTGAAG TGATAAAGTT TTAAAACCAA 180  
A 181

SEQ ID NO:2721

LENGTH:178

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03169

SEQUENCE DESCRIPTION:

GATCCTCACT CCACTGTCAT GTTGAAAGA GGTATTGGTG TTCTGGAGTG GGGGTCAACC 60  
CCTCCCCAGT CTCTGTGCTA AGTCACTTG GGAGGGATGGC AGTAGGGAGCC AGGGCTGGCC 120  
ATGGGTCCCC TACGCTTNCC NNNTAGGATAT ACCCTGGAGA ATGGCAAAAT GATTTAAA 178

SEQ ID NO:2722

LENGTH:287

00972

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03170

SEQUENCE DESCRIPTION:

GATCCTAAGG CAAAGAGGTG TTTTCCTTC TGTTGATTC ATCCCAAAGC TTTCCCACCC 60  
AGGTTTCTC TGAAAGCTTA GCCTTAAGAG AACACGCAGA GAGTTCCCT AGATATACTC 120  
CTGCCTCCAG GTGCTGGGAC ACACCTTGC AAAATGCTGT GGGAAAGCAGG AGCTGGGGAG 180  
CTGTNTTAAG TCAAAGTAGA AACCCCTCCAG TNTNTGGTGT TGTGTAGAGA NTAGGNCATA 240  
GGGTAAAGNG GCCAAGCTGC CTGTAGTTAG TAGAGAAGAN TGGGGAN 287

SEQ ID NO:2723

LENGTH:178

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03171

SEQUENCE DESCRIPTION:

GATCACCATG ACTGCAACAT GGTTTATATT CATGCTGCC TAGAAACTTT TGTAATTATT 60  
TGTTGCAAAT TTGTAAGTGT CCTTATTAAC TTTCTTNAT GTAAGTAATT TGTAAGAGTT 120  
TCTNAAAATT TTTGCTTTG CTTATTTAAT TTTNAATAAA AGCTAAATTC CTAATAAA 178

SEQ ID NO:2724

LENGTH:178

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03172

SEQUENCE DESCRIPTION:

GATCCTGGAG CCCCGTGTG GGGGGGGCAG GGNNGGGCGG TGNCCGACGA GTGANCTTC 60  
TNAACATGAG TGTCAACTTC AGGACTTGCT TCCAAGCCCT TCCCTCTGTT GGAAATTGGG 120  
TGTGCCATNN CTCCCAAGGN AGGCCCATGT GACTAATAAA AAACGTGAA CCCTGAAA 178

SEQ ID NO:2725

LENGTH:337

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03173

SEQUENCE DESCRIPTION:

GATCCTTTG AATTTGCAC AGCCCTAGAT ACAATCCCTT TTGATAAAAG GGTCTTGCT 60  
TCTNATTACA GGAGCACTGT GGAACGTCTG TAAATATGTT TTTATAATTC CATGTATAGT 120  
TGGTGTACAC TCAAACCTG TCCCCGGCAG CCAGTGCTCT CTGTATAGGG CCATAATGGA 180  
ATTCTGAAGA AATCTTGGGG AGGGAAGGGG AGTTNGAACAA AATGTCTGTT CCCTGGGAGG 240  
CCAGTCCAGT GCTCAGACCT TTGACTCAT TGTAAGTTGC CACTGTCAAC ATGGGACCAA 300  
AGGTGTGTGA CTAGTCAATG AAAGTGCAGG CANATTN 337

SEQ ID NO:2726

LENGTH:180

00973

**2153480**

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03175

SEQUENCE DESCRIPTION:

GATCCAAAAC ACTCAATCCT CGTAAAAGGG TACAGGT CCT ATTGTATGTT AACACACGTG 60  
ATGATGTGAG CCATGTGAGA TGANCAATCA CCAGTTGTTA TGTCGAATC TCCTTGTTG 120  
TGGGCCGCTT TAATGTCAGG GTTCACTAA ATAAATGAAT TTTCATATAAC TGAAC TGAAA 180

SEQ ID NO:2727

LENGTH:175

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03176

SEQUENCE DESCRIPTION:

GATCTGAGCC AGGATGGGAG TGAATCCCAG GCGGAGGCCA GAGCTGGCAG CCAGCTCTGC 60  
CTTTCCACTG CCGGGAGTGC TGGGGGCCA GCCTGGCCCC CNGAAGAGAC AGCCAAGTGT 120  
CGTCCACATA CTCCTCCCAG AGTGAGCTCT AACCAAGGCTC ATTGCTCTN TCCAN 175

SEQ. ID NO:2728

LENGTH:175

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03177

SEQUENCE DESCRIPTION:

GATCCTGTTN CCNACCTCCT TCTCCTCCCC TGTACTCCCC AGTGCCTTCC ATTGCTCTGG 60  
TGGAGCTGGG GTTTCTCTCC TCCCCAGTCC CACAACACTG CCAAAATCT GTGTATGTNC 120  
CATGGGTGG GGCAGCCCCA AGCCTCTGG GGAGGCAGGG CAAAAACAGG TGCCN 175

SEQ ID NO:2729

LENGTH:174

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03178

SEQUENCE DESCRIPTION:

GATCAGAGGA AAGATGAGAA AGAGAACAAAG CATACTATC TNACTCCTTC CAGTGGTCTC 60  
TGTCCTCTCC GTCTCCTGGA CCACGGCTAG AGTTCCCAGT TTGGCCTTT GGGGCATTCA 120  
TCCCCTAC TTTATTTCA TCTGCTTGGG CAGTAATGTA AACAAATAA AGGN 174

SEQ ID NO:2730

LENGTH:271

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03179

SEQUENCE DESCRIPTION:

GATCGTCTGG GAGCCAGTG TCAAGTCTGC TGGAAATGCAG GAAGTAGAAC AGAACGCCA 60

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CAGGACTGTT CTGGGGCCAG GTTCCCTAA CTCTGTAGCC TGGCAGTCTG ACCCAAAGTT 120  
 GCCCTCACCC AAAGGTTCTG GCTCTCCCT CCCTCACTTT TACCTTCCTT TCCCCATAA 180  
 GTTGGAGGAT AAAATGGGTA TCAATGNTAA TNTTCCAGG GNGNCCATGN NNACCAGCGG 240  
 TTTCTNNCTN TCTCTGTAAT CTGCTATGNA N 271

SEQ ID NO:2731

LENGTH:178

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03180

SEQUENCE DESCRIPTION:

GATCTNCGGN CTGTCGTTAG CAGGCTTAAT NAAGAACACT TCTAACAGT TTCCTTTTN 60  
 TNTTCCTTTA TAATTCACTA AAATAAAGCA TCTATTAGTG TCTGATTAG GAATGTAAAA 120  
 TAATTCTNTA TTAATGTAAA TAAGATTATC TATTGCAAAA NGATATTCA ANCCTAAA 178

SEQ ID NO:2732

LENGTH:172

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03181

SEQUENCE DESCRIPTION:

GATCTTACCA AAGAGGTCAA CACATGGGAC CTTTGTGTCA CATGAACCAT TTTTTTCCT 60  
 CCTCTATTAA GTGTATTNT GTTTAAGNTA CAGTTCTCTA AGAGAATTAC AATGTTGTC 120  
 CCATTTCTAA GGGCTCTNT TCAACTCTAA TAACAGCATT ATTACACGTTA AA 172

SEQ ID NO:2733

LENGTH:170

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03182

SEQUENCE DESCRIPTION:

GATCAGGAAA CGGCAACAAG CCTCCCGAGTA CTGACCTGAA AACTTGTGAC AAGAAGAAC 60  
 CCAACAAGTG CTCCCTGGGC TGAGGACCT TTNTTGCTC CCCACCCCGG AAGCTGNACC 120  
 TGAGGGAGAC AACGGCAGAG GGAGTNAGCA GGGGAGAAAT AGCAGAGGGN 170

SEQ ID NO:2734

LENGTH:176

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03183

SEQUENCE DESCRIPTION:

GATCTGGATT TATGTATTG TNAGATACAT ACGAATTGTT AAAATGGAAT GCAAGTTTT 60  
 CAAAGCCCA GGTCTAAATG TAATGGTTGG TTTATNGTNC TATAACCCA GCCCATCATT 120  
 TCCTGTGTAATCATAAAACA ATAAACAGAA TATACTCGGT GGCCATTCT AATAAA 176

**2153480**

SEQ ID NO:2735

LENGTH:163

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03185

SEQUENCE DESCRIPTION:

GATCCGCCCA CCTNGCCTC CCAAAGTGCT GGGATTGCAG GCGTGAGCAN CCGCACCCGG 60  
CCTCCTGAAT TAACATTTTC TAAAGATGCC TCCGGCGTGC TATCCTGAAA GCTGCCAGAG 120  
GTGTCTTGGC TGCATTGGTG GTAATAAAAT TCATACTCAT AAA 163

SEQ ID NO:2736

LENGTH:162

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03186

SEQUENCE DESCRIPTION:

GATCTCAACT ATGTNCCACT AAAGGCACAG GAATGGAAAA CTGAGAAAAG ATTATTGGC 60  
CTCACCAATT CCTTTGGTTT TGGTGGTACT AATGCAACAC TTTGTATTGC TGGNCTGTAG 120  
AACATATANT TNGTAATNAA ATACTGATTN TNAAATGTTA AA 162

SEQ ID NO:2737

LENGTH:160

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03187

SEQUENCE DESCRIPTION:

GATCCTGCCA CCCTGTAGCG CCAGTNATAAT CCCCCAGGAG AACATCTTG AACTCTGCA 60  
GACTGCTAGT GTTCTGTCTA AAAACCAGAC AAGGAAATAC CCTTCTTTA TGAGCAGAAG 120  
GAAACAAAAA AAAAANGAG GCCCNNTTNC CTGGANGAAA 160

SEQ ID NO:2738

LENGTH:159

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03188

SEQUENCE DESCRIPTION:

GATCTGCCCTT ATTGCATATN CCATGCATCA GATAATGGAT GCATCAGATA ATGGNGTTAG 60  
ACAAAGCTTC ATTGTAAACA ACCTAATGCA TTTNNGAGAA ACANTCTCAT CACATTTTC 120  
CTAGCCTTNC CTACATTAA NCTTGCTGTT GCCCAAATN 159

SEQ ID NO:2739

LENGTH:157

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03189

**00976**

2153480

SEQUENCE DESCRIPTION:

GATCAGANGT TTCACTTGTT TCTCAGTTAT TGGATATGTA TCTTGTGTA CATATCTTG 60  
CAAAANTGGA TAAGTACAAA NCTTGATGTA AATNGTACCA ATGANTATGT AAACATACAG 120  
TGACANCATT AAACCTAGAA AAGTTTAAA ACTTAAA 157

SEQ ID NO:2740

LENGTH:153

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03190

SEQUENCE DESCRIPTION:

GATCCACTGG AATTAGCCAA TACACTATAT ACAACTACTA TTAAAGTATT TTTCTGG 60  
ATATAATTGG TATATGTCTT CCACTTCCA TCATGTATGT AAAATTCAT AGTAAAACCTT 120  
CCTGATAGTT TCAATAAAAGA AATNATCTGC AAA 153

SEQ ID NO:2741

LENGTH:151

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03192

SEQUENCE DESCRIPTION:

GATCTTNAAT GCTTGGAAA TGCGTGTAAAC AGTACTGCAA TAATCACAGC TCTGGGAAAA 60  
ACAACGAAAC TTTCCCTGT GGAGAGGAGG GATTCCTCTG CTCTATATAA GCAACATATT 120  
TTNAGACATT AAAATATGGT ATNCNNNNCC N 151

SEQ ID NO:2742

LENGTH:150

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03193

SEQUENCE DESCRIPTION:

GATCTTNCTN ATCCAAGCAA TAACGGGACG AGGGAGCCAG GGCCAAAGGAC ACTCAGGGAC 60  
ACTGTTGGGG CAGCGGCCCC ACATGGTAAT GTTTNTTTA GAGAGAAGAA AAAACAACGT 120  
GCTGTAAACG TAAATNATAT TTNTGGAAA 150

SEQ ID NO:2743

LENGTH:150

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03194

SEQUENCE DESCRIPTION:

GATCGTNTT TTNCTTGTAA AATAATTAAA ANTCACTTTA AAATTCTAC TTTGACTTTA 60  
ATTTAGACAC AAGGAGATGT AATCNCTGTG TAACATCAGA GAAAGCTATA TGGATTATNG 120  
TCAGANGTAA ATGTTCTAA CATTGACAAA 150

00977

2153480

SEQ ID NO:2744

LENGTH:149

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03195

SEQUENCE DESCRIPTION:

GATCGAGTTG GCCGAGGATG GATGATTNTG NGCAGCAGAA GCCGTTGCAG CCCCACGTTG 60  
TGCTCTAGGC AGGGACCTT GGCCCTTTG GGGAGGGAGA GACAGACGGG CGGTTGACT 120  
TGGACACAAA GAAAGCCTTG GTTTCTAAA 149

SEQ ID NO:2745

LENGTH:145

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03196

SEQUENCE DESCRIPTION:

GATCCCAGGT CTGGGGATGG GGGACACCTT NGGCCACAGG ATACTGGTTG CTTCAGGGT 60  
ACCCATGCC NCTGCCCTNG CCTGGAATCA GTGTTACTGC ATCTGATTAA ATGTCTCCAG 120  
AAATAAAGAA TAATTCTGCC AGAAA 145

SEQ ID NO:2746

LENGTH:143

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03197

SEQUENCE DESCRIPTION:

GATCACTCNT AGAGTNGCCA TTCTGCANCT TCCTAAAAAT ATTTTAAAAA TACATTATT 60  
TTACTAAATA CTGACTACAT TTNTNTGTTA ATATTGAGCT AAATGTTAAA AAATGGCCAG 120  
ATTAAGAT ATCAATTGT AAA 143

SEQ ID NO:2747

LENGTH:142

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03198

SEQUENCE DESCRIPTION:

GATCCATAGT GTGCATGGC AGACACATTT TGCCTCTATG TCTCTTTAAA TTTAATTAA 60  
AAATACTCTT TCCAGTAATC CTAATTGCA CGAAGATATA ATGTCCACAT TACGTGCCTT 120  
GCCTTGAAAT CTAAAAAACAA AA 142

SEQ ID NO:2748

LENGTH:142

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03200

00978

2153480

SEQUENCE DESCRIPTION:

GATCTCACAG GACTGAGAAC TCGTTCACCT CCAAGCATTT CATGAAAAAG CTGCTTCTTA 60  
TTAATCATAAC AAACCTCTCAC CATGATGTGA AGAGTTCAC AAATCTTCA AAATAAAAAG 120  
TAATGACTTA GAAACTGCCA AA 142

SEQ ID NO:2749

LENGTH:141

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03201

SEQUENCE DESCRIPTION:

GATCTTTCA TTTCTTACTA GCTTTAAGA AATNAAATAC TTGCCTGAGA TAGAAATACT 60  
TTATTTTGTA AACTTAAGG TCTAAATNAC TAAACTTCAA AGTAAGATTT TNTCAGAATA 120  
AATTGAGACC ATTAATCTAA A 141

SEQ ID NO:2750

LENGTH:140

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03202

SEQUENCE DESCRIPTION:

GATCAGAAAA AGAAAGAACG CAAAGAGAAA GGTACCTGGG TTCAACTANA ACGCCACCTT 60  
GAGCTGCTGG AACCTATTCC CTATGAATTC ATGGCATAAT AGGTGTTAAA AAAAAAAAANA 120  
AAGGACCTCT GGGNTACAAA 140

SEQ ID NO:2751

LENGTH:135

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03204

SEQUENCE DESCRIPTION:

GATCCTATTT TCNTACAACC TTTCACTGAC ATCGTTCAAGG NTTCTTCTT GGCCATTAA 60  
AAAAACAAAT TTTTTTTNC TCACTTGAA GTCAACGCCA GTNCCTAAGT NAGGCTAACG 120  
GNGACTTTGA CAGGN 135

SEQ ID NO:2752

LENGTH:134

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03205

SEQUENCE DESCRIPTION:

GATCAGTAAT AGATNTAGAT ATACTATTT NATATTGTAA GCAGTTACNT ACTCAGGATT 60  
AGNATTGAA TTCATTTGAT TTAATATGTA ATAGGTAAATA TTAAAANTAA AGATTTATG 120  
CTTGAAACT CAAA 134

00979

2153480

SEQ ID NO:2753

LENGTH:133

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03206

SEQUENCE DESCRIPTION:

GATCAGACGT CGCTGAGGGG CTGTNCACCA CCATCCTCGT TCTCCAGGGT CAAGGAAGTG 60  
TTTAACATG TCGTGTTC GACTTGACCT TGTGGTATT TNCTNGGCCT AGTTGTGTGC 120  
CATGGATATT AAA 133

SEQ ID NO:2754

LENGTH:141

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03207

SEQUENCE DESCRIPTION:

GATCACTGTA GTTTAGTTCT GTTGACCTGT GCACCTACCC CTTGGAAATG TCTGCTGGTA 60  
TTTCTAATTC CACAGGTAT NAGATGCCTG CTTGATAATA TATAAACAAAT AAAAACAACT 120  
TTCACTTCTT CCTATTGTAA A 141

SEQ ID NO:2755

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03208

SEQUENCE DESCRIPTION:

GATCGTTATA TTTNACATAA TATAAACAAA ATNACTAATG CATCTATATN CTTGGTTCC 60  
TTAAACTACA ATNAACCACA GAATGGGTGA AAATGCAGGC ATGCACGCTT GGCGTAATCA 120  
TGGATGNNGC TN 132

SEQ ID NO:2756

LENGTH:131

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03212

SEQUENCE DESCRIPTION:

GATCCGNCCG CCTCAGCCTC CCTATATGTT TTAAAATATA ANTTTATTCT TATAAAANTA 60  
AATTNAANCT AGATTGAGGT AGTAATTACA ACAGTCCAGC ACATTATGGA TAATTAATAT 120  
TNATATTAT N 131

SEQ ID NO:2757

LENGTH:136

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03213

00980

**2153480**

**SEQUENCE DESCRIPTION:**

GATCTGATAT TTTAAGANT TGGAGACCAT TTCCCTGTGCC AGANTCACTG CTCTATTCCA 60  
TACCGTGCCA TGGAGGCTGT TTTAGAAGTG GTTGGATAAC ATGTTAAATA AAATATTAAG 120  
TGTAAAAAAA AATAAA 136

**SEQ ID NO:2758**

**LENGTH:129**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS03214**

**SEQUENCE DESCRIPTION:**

GATCCACCCA CCTTGGCCTC CCAAAGTCCT GGGATTACAG GTGGGAACCA CAGCACCTNA 60  
CCCAGAACAT ATAAAGACACTT TTNTAATGTG CAATGAAAAA TATGTTAAATA AANTATTTT 120  
ATCTNTAAA 129

**SEQ ID NO:2759**

**LENGTH:129**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS03215**

**SEQUENCE DESCRIPTION:**

GATCCACCGT ACCAGGNAGC AGAAATATTT CTACAAAGGG GGCCTAGTTT GGAATGAGAA 60  
CANNTCTGAC GCCCGGTATG TGAAGGAGAA CTGCAAACCT CTGAAGAGTT ACATGCTCCA 120  
AGACTCCCN 129

**SEQ ID NO:2760**

**LENGTH:408**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS03216**

**SEQUENCE DESCRIPTION:**

GATCATGTTG GGATTAACCT GCCTTTTCC CCAAAAANNA AACTCTCAGG CAAGCATTTC 60  
TTTAAAGCTA TTAAGGGNGT ATATACTTGA GTACTTATTG AAATGGACAG TAATAAGCAA 120  
ATGTTCTAT AATGCTACCT GATTCTATG AAATGTGTTT GACAAGCCAA AATTNNNGGG 180  
TGTAGANATC TGGAAAGTTC ATTCCCTGGG ATTCACTTCT CCAGGGATTT TTTAAAGTTA 240  
ATTTGGGAAA TTANCAGCG TTCACTTAT TGTGAGTCTT TGNCACATT GACTGAATT 300  
AGCTGTCACT TGTNCATTAA AAGCAGCTGT TTTGGGGNCT GTGAGAGTCC ATGTATTATA 360  
TCCAAGCCCA CCAGGGCTTN CCCTAAGGAN TTGCCATNGT AATACCCN 408

**SEQ ID NO:2761**

**LENGTH:128**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS03217**

**SEQUENCE DESCRIPTION:**

**00981**

2153480

GATCTAGGAA AGAAGGCAAC TGAAAAACCT GAAAGAAAAA AAATNAAAGA TTAAAAGTAT 60  
ACGATATTCT ATTTGATT AGCAATTACT TGTTCNCAG TGTNCTGTNA ATTTTGTTN 120  
ACTTTAAN 128

SEQ ID NO:2762

LENGTH:258

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03218

SEQUENCE DESCRIPTION:

GATCGGCAGG CTGAGGACCA GGTCTTGAGG AAGCTGGTGG ATTTGGTCAA CCAGAGAGAT 60  
GCCCTCATCC GCTTCAGGA GGAGCGCAGG CTCAGCGAGC TGGCCTTGGG GACAGGGGCC 120  
CAGGGCTAGA CGAGGGTGGG CCGTCTGTT TCGTTCCCAC AAAGAAAGCA CCTNACCCCA 180  
GCACAGTGC ACCCNCTGTT ATCTGGGCTG NCTGGCAGAG AGCCTTGCTG TTTACAATTA 240  
AAATGTTCT GCCACAAA 258

SEQ ID NO:2763

LENGTH:128

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03219

SEQUENCE DESCRIPTION:

GATCCTTGTG GGTCTAGCTA AATACTGTTA GGGGAGTGTG CCCCATCTCA TCATTTCGAA 60  
GATAGCAGAG TCATAGTTGG GCACCCAGTG ATTGGGTTCA AAAATAAAGC TGGTCTGCCT 120  
CTTCTAAA 128

SEQ ID NO:2764

LENGTH:126

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03220

SEQUENCE DESCRIPTION:

GATCTNCCGC TCCCTCCCTG AAGGGCATGG GGCCAGGGNA GTCTGGACAG CCGCCCCCAG 60  
CCTGCTGACC CCCAGCTTC TACAGACACC ANATTGTAA ATAAAGTTGG GGAATGGACA 120  
GCCAAA 126

SEQ ID NO:2765

LENGTH:126

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03221

SEQUENCE DESCRIPTION:

GATCTTTTA GGCCTTCATT TTATGTTTT CCTTAACTGT TATATTATNA TTGTAACATA 60  
GATTATACTA CTACTAATTN NTGGATGTNT CAAAAGGTCA AGAAGTAAAA NATGTTAGAA 120  
AGCAAA 126

00982

2153480

SEQ ID NO:2766

LENGTH:125

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03222

SEQUENCE DESCRIPTION:

GATCTCTGCA CAGTTCTTG TTTAGTCTTA TGCCTTTAG TTGAAAAACA AATTGTATT 60  
TTTCCTNCT AAGTTCATG GCCCTAGAGA AGAAGCCAAT NTNNNTAAAG ATGTTATCCC 120  
NGAAA 125

SEQ ID NO:2767

LENGTH:124

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03223

SEQUENCE DESCRIPTION:

GATCCTGGTT TCAATGACGG TTGGAAATAG AAATTNCCAG AGAAGAGAGT ATTGGGTAGA 60  
TATTTTCCT GAATACAAAG TGATGTGTT AAATACTGCA ATTAAAGTGA TACTGAAACA 120  
CAAA 124

SEQ ID NO:2768

LENGTH:131

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03224

SEQUENCE DESCRIPTION:

GATCACTTAG CAACATGCTT GGNAATTGG NATCTNTAAA GGTAGGAGAG TGGTGAACAG 60  
ATAATCTATG CATATATNAC TAGTGCAAG ACATAAAGCG GGGGAAAATA TATTTANCC 120  
CAAACATTA A 131

SEQ ID NO:2769

LENGTH:123

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03225

SEQUENCE DESCRIPTION:

GATCAATTAC CTAACTGTT CTTGGTCTAT TTATGTATAA GAATGCTTT TAAAGCACAT 60  
GTCTCATTAA AAATNACGCA CAAACTGAAG ATGTTAATAA AATTTAAGAG TAATACAATG 120  
AAA 123

SEQ ID NO:2770

LENGTH:388

TYPE:nucleic acid

TOPOLOGY:linear

00983

**2153480**

CLONE:HUMGS03227

SEQUENCE DESCRIPTION:

GATCCATTG TCTGGCAGGA GGTTTTGAT GATAAAGCAA CGCTTGCAGC AAGGCACAAT 60  
AGTTGAAGNA TGGAAAGACA GCGCATATCC TGAGGAACTC AGTAGAGTCA CAGCATCTGG 120  
CTTCCCCTGTA ATCCTTCTN CTCCTNGGT A CTTAGATTNG ATTAGCTATG GACAAGATTG 180  
GAGGAAATAC TATAAAGTGG AACCTCTTGA TTTGGCGGT ACTCAGAAC AGAAACAAC 240  
TTTCATTGGT GGAGAAGCTT GTCTATGGGG AGANNNNTGTG GATGCAACTA ACCTCACTCC 300  
AAGATTTATG GCCTCGGGCA AGTGCTGTTG GTGAGAGACT CTGGAGGTTG CAAAGATGTC 360  
AGAGATATGN GATGACGCCAT ATNACAGN 388

SEQ ID NO:2771

LENGTH:219

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03229

SEQUENCE DESCRIPTION:

GATCGATGGA CGCTAAATAA GCTGCCATTA ACACATCTGG TTACTGCTGT AACATGACTA 60  
ATAAAAACCGA ACGCCTGTT CCCTTACCCG TGTGGGGAC ACGCAGATGA GTGAATTGGA 120  
ATGTCAGCA GAGTTACCCCT CCCAATTATA TGTTCATTTT GTATATTTTT TGGTCGGGGG 180  
AAAAATTGAC CTGCAGTAAA AAAACCTTG ACCATTAAA 219

SEQ ID NO:2772

LENGTH:120

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03230

SEQUENCE DESCRIPTION:

GATCAGCACCA GGAAGAGCCT TCCTAACGCAT GTGGTCCCAG GGAAGGGTGA AAAGTAGGAG 60  
TTATGAACGT AATCCACCTA CTACAATGTT GAATTAAGT TATAATCTCA TAACTTCAAA 120

SEQ ID NO:2773

LENGTH:120

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03231

SEQUENCE DESCRIPTION:

GATCCGCCCG CCTCGGCCTC CCAAAGTGCT TGGATTACAG GCATGAGCCA CCGCACCCAG 60  
CAAGAGTTAT TTNNNTAACT TGAAATTTC TACTAGCCCT GGTGAACCTC TGTGCTAAA 120

SEQ ID NO:2774

LENGTH:119

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03233

SEQUENCE DESCRIPTION:

**00984**

2153480

GATCCAAGGT GATACTGATG GAGATGTTGG TAGTGAATN CATGTA CTTT 60  
TAGTNCTTC TATGGAATCT AGAGGNAGAA TACATGTACA AGAATATCGA CTACCGTCN 119

SEQ ID NO:2775

LENGTH:117

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03234

SEQUENCE DESCRIPTION:

GATCCCAGCT GTGTGTCACC AGCAGCTTTC CCAGCTTCTC TGTGAGGGTC ACTGCTGCC 60  
ACTGCAGGGT CCCTGAGGTG AAGTAAACGC CGGCCTGGG CTTGCCAGN CGGCAA 117

SEQ ID NO:2776

LENGTH:115

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03235

SEQUENCE DESCRIPTION:

GATCATTCCC ATTCATAGG TTTTATTGT GGAATAGTCA ACTTAATATA GATTCA CTTT 60  
CAATTTGCAT GTATAANGTA ATACTCAATA AAATTTTTC CATTNATTN NCAAA 115

SEQ ID NO:2777

LENGTH:217

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03236

SEQUENCE DESCRIPTION:

GATCCTGGGG TTGGCTGCT TTGTGTATGG TACTTGAAAC CACGCTGTAA TTATTGTCCT 60  
GTTGCCAAC AAAAGCCAGT CATGTAACTC TAGAAGCAGT GACTGGTGGG GCTTTCTGAC 120  
AGTTCCATGC TGATGTATCA GGCCATCTGT GTCATGCTTA TGTATTATGG CAAGAAGAGG 180  
AAAAGTGGAT TAATAAATAC GTTTNNNN NGTAAA 217

SEQ ID NO:2778

LENGTH:114

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03237

SEQUENCE DESCRIPTION:

GATCCTNAGC AACGAACACC TGCACTTAGA AAAAGTGGAC AGCTTCTNCC AACCACACCC 60  
TACCCATGGN ACTGTATGCA ATTAACCTCCT GGAAACGCC CGTAAATNCN AGTN 114

SEQ ID NO:2779

LENGTH:113

TYPE:nucleic acid

TOPOLOGY:linear

00985

2153480

CLONE:HUMGS03239

SEQUENCE DESCRIPTION:

GATCCAAAAT TACCTTAAAT GGAGTTAAGT AGGCTTGCA CTAATGGAT ATAAAAGAGG 60  
CTGTCTGGNC TNCTATGAAA TNATGATTAA AACCTTTGT GTTGTCTTT AAA 113

SEQ ID NO:2780

LENGTH:359

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03240

SEQUENCE DESCRIPTION:

GATCCTTAAA GAAGGTGTGG GGTCTTCCC AACCTGAGGA TTTCTGAAAG GTTCACAGGT 60  
TCAATATTA ATGCTTCAGA AGCATGTGAG GTTCCCAACA CTGTCAGCAA AAACCTTAGG 120  
AGAAAAACTTA AAANTATATG ATTACATGCG CAATACACAG CTACAGACAC ACATTCTGTT 180  
GACAAGGGAA AACCTCAAA GCATGTTNT TTCCCTCACC ACAGCAGAGC ATGCAGTACT 240  
AANGCGATAT ATTTNTGATT CCCCATGTAA TTCTCGGNG GNNGGNCAGT GCAGTNCTCT 300  
TTCGGAAGCT TAAGATGCC NTNGGGCTG NCCNNNNNGGN CATATCCCC TGAAGGGCN 359

SEQ ID NO:2781

LENGTH:191

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03241

SEQUENCE DESCRIPTION:

GATCTAGGGC AGGCTGTCTT CCAGTCCATG TGTTCTCGGT CGCCGTAGAC AGCGCTCTGG 60  
CTACCACCGT GAGGCTACTT GAACTGTCAG GGGCATCTGC CTAAACCAGA ATCTTTGTC 120  
AGAAAACCTTA ACCCAACAAA ACAAACTTG AGTAGCTCAT GCCCGGCTCT TAGGAATT 180  
GTCTGTTAA A 191

SEQ ID NO:2782

LENGTH:111

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03242

SEQUENCE DESCRIPTION:

GATCACTCAA CAGCACTGTN ATGTATTATT TNNAATGAGG TGCCCTTTT AACTGACCAA 60  
ATGCTGCCCT GTTGGCCCC TAANTCAATA AAATATGTTA AAATTTGAA A 111

SEQ ID NO:2783

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03243

SEQUENCE DESCRIPTION:

GATCTAAGAA ATAGAATTAG GGAGAGTTA CACTTACTTA CCTATATAAA AGCAGATTT 60

00986

CNTGGAAGAA ACCCTTTTT TTTTTTTT TAAAANAGNA NCANCCAGN

109

SEQ ID NO:2784

LENGTH:340

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03244

## SEQUENCE DESCRIPTION:

GATCCAGAAG CTGGTGGACG TCACCACGGC ACAGGTGTAA CNTCCATGTN CCGTGTGAGC 60  
 AGAGTCCTTA CCAACGGGCA GGTCTGCATC CGGGGAGAAAT GCAGCTGCTT CTGGCGACAA 120  
 TCCTGCTAGT AAACACTGGT CTTCCGGTAGG CAACGAACAC TCGCCTGGGN TGGGAAACTG 180  
 CATGCCCACT TTNTGGGAGG GGTAGTGCA GGTGCCGTGG ACAAAGGACA ACATTCTNT 240  
 GGGGCTTTT AACTTTATT CCTAAGACTC TAAAGGCGTT GATTCAACC CTCCTTCACT 300  
 CTGGCTTCTT CAGGNAACCC ACGTGGTCTC CTGTNAGNTN 340

SEQ ID NO:2785

LENGTH:108

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03245

## SEQUENCE DESCRIPTION:

GATCTTAAG ACAACAAGTT AGGTTCTAC TGGAGTTACC TGCCAGANTG GCCTCTTAAT 60  
 TAACTCAGGT AATGAAGAGC TAACTGTGTT ATAATCATCT NCCNNNTN 108

SEQ ID NO:2786

LENGTH:108

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03247

## SEQUENCE DESCRIPTION:

GATCTGCTAA AAATGGCAAT TGTAGAATNA TGTTGTATGT AATGTACATA TGGAGAAAGA 60  
 ATGTATTTN TCCATTCT TAATAAAATG TTATATATGG NTGCTAAA 108

SEQ ID NO:2787

LENGTH:107

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03248

## SEQUENCE DESCRIPTION:

GATCTCTGAG GCTNCGGTCA CCACCCACAA GTTGTGGCCT TGGATACAC ACTNCAGTTG 60  
 GGTGGTGATG GGGTNGTGC TTCTAACTTT TNCCNTATCT TTACCGN 107

SEQ ID NO:2788

LENGTH:125

TYPE:nucleic acid

2153480

TOPOLOGY:linear

CLONE:HUMGS03249

SEQUENCE DESCRIPTION:

GATCAGTAAG GATGACTGGT GTTTCCTGAC TTTNACAAAA TTACTTGTTT GTTTCATTA 60  
AAAAAAAAAGC ATAANCTATG TTTCTNATT A TATTAGAAT TATTAAATT CAAAATGAAT 120  
CCAAA 125

SEQ ID NO:2789

LENGTH:104

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03251

SEQUENCE DESCRIPTION:

GATCGATTCT NTGACACAAA CCCCACCAAT TGTNAATGCA AGTTTTATT TGGCTGTATA 60  
TACAATTTAA GCTATTAAGA TTTGTACAAT ATTTACAAAT NAAA 104

SEQ ID NO:2790

LENGTH:104

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03252

SEQUENCE DESCRIPTION:

GATCATTACA TCTNAGATGT ACGTNGGTT AGTCGGAAAG GTGGGACGAT TTGAAGGGGA 60  
GGNACTTCA GGTCA TAGGC GGATTAAGAAT ATGTCCTGAT TAAA 104

SEQ ID NO:2791

LENGTH:104

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03253

SEQUENCE DESCRIPTION:

GATCCAAGCT ATGANATANC CAACAGTATT CAAGANGCAA CCAGCACCAT CATGTGATAA 60  
TGGTACTATG GCATATATGC AACATTAAGA TTTAANTTA GAAA 104

SEQ ID NO:2792

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03255

SEQUENCE DESCRIPTION:

GATCCAGTCT TAATTTGAGC ATGAGAGCAA AATTTAGTCA TCTACACAAG AAGCAAAGC 60  
AAGGAATAGT TGTTGGGTTT TNGTTTTG GTTGTGTNT TTTTTGTTN GTTAGGNANG 120  
ANGTGTCCC GN 132

SEQ ID NO:2793

00988

2153480

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03257

SEQUENCE DESCRIPTION:

GATCCAGGTG GTGTTACATG TCCATTCAT GTTTGGGG CTTTAGCCC NACAAAACAC 60  
CTTCAGTAGA GCCTTGATTA AAAGGAAACC TGNAGACTCA AA 102

SEQ ID NO:2794

LENGTH:100

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03258

SEQUENCE DESCRIPTION:

GATCTTCCCC TAGGGGGCCC TCTTACTCCT NCCTCTCTCC TCCTCCTTCC CCATTGCTGT 60  
AAATATTNA ACGAAATGGA AAAGAAAAAA AAAAGACAAA 100

SEQ ID NO:2795

LENGTH:100

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03259

SEQUENCE DESCRIPTION:

GATCACACAT CAAGACTATC TACAAAANTT TATTATATAT TTACAGNAGA AAAGCATGCA 60  
TATCATTAAA CAAATAAAAT ACTTTTATC ACAACACAAA 100

SEQ ID NO:2796

LENGTH:98

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03261

SEQUENCE DESCRIPTION:

GATCTAAATA CAAAGGATAT ACAGTCTTGA NTCTAAAATA ATTTGCTAAC TATTTGATT 60  
CTTCAGAGAG AACTACTAAT AAAATCTAA AAGGTAAA 98

SEQ ID NO:2797

LENGTH:97

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03263

SEQUENCE DESCRIPTION:

GATCGTNCT ATAAATAGTA GGACCAATGT TGTGATTAAC ATCATCAGGC TTGGAATGAA 60  
TTCTCTCTAA AAATAAAATN ATGTATGATT NGTTAAA 97

SEQ ID NO:2798

00989

**2153480**

LENGTH:96

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03264

SEQUENCE DESCRIPTION:

GATCACTAAA GTATATCTTT AATTCTGGGA GAAATGAGAT AAAAGATGTA CTTNTGACCA	60
TTGTAACANT AGCACAAANTA AAGCACTTGT GCCAAA	96

SEQ ID NO:2799

LENGTH:93

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03267

SEQUENCE DESCRIPTION:

GATCTGCTGT CTCCGTCCCT CCTGGGTCCC AGCAGCTGTC CTGCAGCTGT CAGCAGGAGG	60
GCCTGGCTTT AATAAAGAGT GGACAAACTG AAA	93

SEQ ID NO:2800

LENGTH:93

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03268

SEQUENCE DESCRIPTION:

GATCAAGTTC GAGGAGGCAG TCATCGCTCG AAACCGGGCC CTGGAGGGCC GCTNACCCTG	60
CCGGANATAA AGNATACAGA GAGCCCCCTCC AAA	93

SEQ ID NO:2801

LENGTH:89

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03271

SEQUENCE DESCRIPTION:

GATCCATTCT TGTATTGATA GATATTGAA TGTTTCCAGT TTTTCCTATT ATGAATAAAA	60
CTGCTATGAA CATTCTTGTA TAAATCAA	89

SEQ ID NO:2802

LENGTH:95

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03274

SEQUENCE DESCRIPTION:

GATCGACAGC GTCCTGGCCT AGGGTGCCGG GGCCTGAAGG TCAGGGTCAC CCAAGCAACA	60
AAGTCCCGAG CAATGAAGTC ATCCACTCCT GCAAA	95

SEQ ID NO:2803

**00990**

2153480

LENGTH:84

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03279

SEQUENCE DESCRIPTION:

GATCTCTACA GAGAGAAGTG GAAAATGCTG TATCAAGGGT GGGCTTAGCT GTGCCTTCC	60
AATAAAGATG TGAGAAGCTT CAAA	84

SEQ ID NO:2804

LENGTH:79

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03281

SEQUENCE DESCRIPTION:

GATCTTGCC CCTGGTATGC ATTTNTGGAC TCCACTGAAT CCTGNGAAAA AAAATTAAC	60
TTCCTTCTTA CTTGCCAAA	79

SEQ ID NO:2805

LENGTH:79

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03282

SEQUENCE DESCRIPTION:

GATCCTGTCA GTTCCATNAG CTATTCCTCT TTGGTTGGC TTTTGATAT NATAAAAATA	60
ATNTTTAATT CCTTTAAA	79

SEQ ID NO:2806

LENGTH:77

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03283

SEQUENCE DESCRIPTION:

GATCAATTTC TATAAAATC GAGACAGTTC TGTGGTTAAA TCTACAAATT AAAGGGAAAT	60
TAGAAGTTGG CGTGAAA	77

SEQ ID NO:2807

LENGTH:77

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03284

SEQUENCE DESCRIPTION:

GATCTATTTC ATGCATATTG TTTATAAAGA CACATTTACA ATTACTTTT AATATTAATA	60
ATNACCATAT TATGAAA	77

SEQ ID NO:2808

00991

2153480

LENGTH:75

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03286

SEQUENCE DESCRIPTION:

GATCTTCAGT AAGTCTCTCA GGCTCTCTGA GCTTGTTCAT CCTTGTTTT GAAAAAATTA 60  
CTCAACCAAT CCAA 75

SEQ ID NO:2809

LENGTH:74

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03289

SEQUENCE DESCRIPTION:

GATCCCTTCA CAGCAGTAAA CCAGCTCTT GGAACCGATT CCATCACCCC AATAAAGGAG 60  
CTCTTCACAG CAAA 74

SEQ ID NO:2810

LENGTH:73

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03294

SEQUENCE DESCRIPTION:

GATCTGTTTC TTTTTAATT TACACTTTN CTTTCCGGTT TGCCGGAATA AACAGGACCT 60  
TTGACATTG AAA 73

SEQ ID NO:2811

LENGTH:66

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03296

SEQUENCE DESCRIPTION:

GATCCATTCT AAGACTTATT GGCTGTTGG AAGTGATAGC AAATAAAANC CACCTTGAAC 60  
TGGAAA 66

SEQ ID NO:2812

LENGTH:67

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03297

SEQUENCE DESCRIPTION:

GATCCGAGGG GGAGGGGTGG GAAGGGGAGA AAATNAAATA AAAGATAATT ACTGAACACG 60  
CCGNAAA 67

SEQ ID NO:2813

00992

2153480

LENGTH:63

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03299

SEQUENCE DESCRIPTION:

GATCATTGAA TTTAAGGCC ACCCCAAGTC CAGANTGACC TCGCAAGACC CTTAACTCAC 60  
AAA 63

SEQ ID NO:2814

LENGTH:62

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03300

SEQUENCE DESCRIPTION:

GATCTTTGT ACTTNNTNATA ACCTAATGTC AGACTAAGAA AAATAAAATA TCTGAGAGTA 60  
AA 62

SEQ ID NO:2815

LENGTH:60

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03304

SEQUENCE DESCRIPTION:

GATCCCTTCG AGACTAANTC TGTACCAGT CATGAAACAT TAAAACCTAC AAGCCTTAAA 60

SEQ ID NO:2816

LENGTH:68

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03305

SEQUENCE DESCRIPTION:

GATCTTGTG TTTGTGTCATG ACAAAAGCATT TATTAATAA AGTTATGCAN TCAGTTAAA 60  
AAANCAAA 68

SEQ ID NO:2817

LENGTH:58

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03306

SEQUENCE DESCRIPTION:

GATCAGATT TTTATGCCAT CCTCATTAGT TTTCCAATAC AATATAAGTT GAAACAAA 58

SEQ ID NO:2818

LENGTH:58

TYPE:nucleic acid

00993

**2153480**

TOPOLOGY:linear

CLONE:HUMGS03307

SEQUENCE DESCRIPTION:

GATCTCAGAC TTCTGGCTTC CACAACGTGA ACAATAAATT TATGTCGTTT AAGCCAAA 58

SEQ ID NO:2819

LENGTH:57

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03308

SEQUENCE DESCRIPTION:

GATCCACTGG GTGAATCCTC CCGCTCAGAA CCAATAAAAT AGAATTGACC TTTTAAA 57

SEQ ID NO:2820

LENGTH:56

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03310

SEQUENCE DESCRIPTION:

GATCTGTGGT CATTGTCCCT CTGCAGAATA AAGATTGCTC AGGCCTGCCT GGCAAA 56

SEQ ID NO:2821

LENGTH:59

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03311

SEQUENCE DESCRIPTION:

GATCTTGTT TTGTTCCAG GTTGGTTAT TATNAATAAA GTTGCTGTGA ATACTTAAA 59

SEQ ID NO:2822

LENGTH:56

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03312

SEQUENCE DESCRIPTION:

GATCTTCATT GGGGGATTGA GCAGCATTAA ATAAAGTCTA TGTTGTATT TTGAAA 56

SEQ ID NO:2823

LENGTH:54

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03313

SEQUENCE DESCRIPTION:

GATCTAAGAA ATAAAGAGAA ATGTTTCANT TTGCATTGAA ATAGGAAAAC GAAA 54

**00994**

**2153480**

SEQ ID NO:2824

LENGTH:53

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03315

SEQUENCE DESCRIPTION:

GATCATNACT GGCTTGCAG ATCGAGGGGC CATTAAAGAG TCTACTTTTC AAA

53

SEQ ID NO:2825

LENGTH:52

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03318

SEQUENCE DESCRIPTION:

GATCTTTTA AAACTGCAAG TGTGAATAC TAGAGGTTGT TAGACCNTTA AA

52

SEQ ID NO:2826

LENGTH:51

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03319

SEQUENCE DESCRIPTION:

GATCTTGCCA CTGTAGTCCA GGCTGGCTA CGGAGAGACC CTGCCTCCAA A

51

SEQ ID NO:2827

LENGTH:54

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03324

SEQUENCE DESCRIPTION:

GATCCTTGCT GATAAATATA ACCATCAATA AAGAACGATT CTTTCCAAA GAAA

54

SEQ ID NO:2828

LENGTH:50

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03325

SEQUENCE DESCRIPTION:

GATCTCACCA CACTGCAACC TCTGGCGACA GAGCGAGACT TGGTTCAA

50

SEQ ID NO:2829

LENGTH:50

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03326

00995

**2153480**

**SEQUENCE DESCRIPTION:**

GATCCACCCA CTCTCTGAAA CTTCTTGCT AATAAAACAT TCCTACTAAA 50

**SEQ ID NO:2830**

**LENGTH:55**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS03331**

**SEQUENCE DESCRIPTION:**

GATCTTTT TTTCTTACA GACACCCATA ATAAAATATC ATATTAATATC TCAAA 55

**SEQ ID NO:2831**

**LENGTH:53**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS03332**

**SEQUENCE DESCRIPTION:**

GATCCAGGGG GAAATGCTGG AAGTCATAA AACTGAGTT TGAGAGCTT AAA 53

**SEQ ID NO:2832**

**LENGTH:131**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS03356**

**SEQUENCE DESCRIPTION:**

GATCCACATA AAAAGAAATG TGAAGTTTC TTTACTATC TTTCATTTA TCAAGCAGAG 60

ACCTTTGTG GGAGGGGGTT TGGGAGAACCA CATTCTAAAT TTGAATGAAA TGAAATCTAT 120

TTTCAGTGAA A 131

**SEQ ID NO:2833**

**LENGTH:431**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS03374**

**SEQUENCE DESCRIPTION:**

GATCTGCTGA TTGCATTATT TAAATTGCT TTTCTGGAA AGCAGTTTG CTAAAAGCTG 60

TACAGACTTT TNCTTTGTA CCTAGCAGTA CTTTATATAG TATAGCTTTG GGCCATGTAG 120

CATTTTAAGA CTCATTAA AAAAATNATT AATCTGTTGC TGACTCTAA TTCCTATTTC 180

AATATGTGTT TCCTTGAAGA ATTCAAGGATA CAACTTCTTG TGTATGACAG CTTTCTTCA 240

CACACTATTT TNGTGGGTGT GTATATATCT GATTTGGAA GAATTAAAA AACACATAGC 300

TTTTNAATTN GTTTGAAACA GACTTTCTGC CTGTGACATT TNNGCNTTA NCCAATTAAA 360

GAAGCCAATG GCATTTNGG TNTTATATNG TGTTTCCAC TAGTATATCC CTGTGGATTT 420

GTTTGTGCC N 431

**SEQ ID NO:2834**

**00996**

2153480

LENGTH:429

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03375

SEQUENCE DESCRIPTION:

GATCCCATGG GTGGCACATT GGGACTTCTN TCCCTCCCCC ATCTACACAG AAGACTGTCA 60  
CCATGCTGAC AGAACGCCTGT CCTTGTAAGG CCCAGCCTTC CAGGGGAACA CTCAGACATG 120  
TTCATTCTCT TCCTGCTTCT GCTCTGGGCC GGTGGGTGGC TCTCAGAAAA TACTTGCTGC 180  
TGGCAAAGG CCTGTACTCA GGCATTGCT TTGACTTGAT GTGCCAAGG GACTGAGGCC 240  
ATTGGCAGGC TTAGTACAC CTGCTCCTCA TCTTAGGAGT CTCCTTTCA AATAATTAGG 300  
CTCTGTTCCC ATTTAAAC TCTGATATTG GGCTTCACCT GTGACTGGAC ACTTTACTAG 360  
AGGCCCATTT NCACTAAACA NTAAAATCTA AATAAATTGG AAGGAATAAC AACNACAAAG 420  
GGNTAGAAA 429

SEQ ID NO:2835

LENGTH:427

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03376

SEQUENCE DESCRIPTION:

GATCTGGGCT TCCTNACTTC TGGAGAAGTG GCCATCCCAT GCCCACCTT NCATGGAGG 60  
AGTGGGCCT GCCAGCTGCC ACAGCTGCAT GACCTGCTTC CCCACCCAC GGTGTCGTTT 120  
TNTTTNAAA GGTACCTGT CCTCACTCAC CCAGCCAGCC CTTCAAGGTGC NTTCTACTCC 180  
CAGTGCCAAA GCCAGACAC TGGGGTTCC TGCTGCAGGA ATTGGGGGCT GGGAACAGCA 240  
GAGGGGATAG AAGTNGGTG GAGGTGGAGT GGGCACGCNT TAGCCTACGG AAAGGNCCAT 300  
TTTTGGGNC CACTGAGCTG CACTGGGATT TTTCANTTCT GGNCTGANT NCCTTAGGG 360  
NAAATAACAC AGCAGGACCN CGGTGGGAT TTTAAGNACT TTTTTNNNA GATTNAANG 420  
GNTTCTN 427

SEQ ID NO:2836

LENGTH:416

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03377

SEQUENCE DESCRIPTION:

GATCCTGATG CTGCCAGAGC CATTGTGGAT GCTTTACCAC CACCCCTGTGA ATCTGCCTGC 60  
ACAGTACCAA CAGACGTGGA TAAGTGGTTC CATCACCAAGA AAAACTAAATG AGATTCTCT 120  
GGAATACANG CTGATATTGC TACATCGTGT TCATCTGGAT GTATTAGAAG TAAAAGTAGT 180  
AGCTTTCAA AGCTTAAAT TTGTAGAACT CATCTAACTA AAGTAAATTC TGCTGTGACT 240  
AATCCAATAT ACTCAGAATG TTATCCATCT AAAGCATTTC TCATATCTCA ACTAAGATAA 300  
CTTTAGCAC ATGCTTAAAT ATCAAAGCAG TTGTCATTG GAAGTCACTT GTGAATAGAT 360  
GTGCAAGGGG GNCGACATAT TGGNTGTATA TGTTNCNT ATGTTAGGGG ATAAAN 416

SEQ ID NO:2837

LENGTH:398

00997

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03378

SEQUENCE DESCRIPTION:

GATCAAAGAT GAGGCCACAA GGACACCAGC AACTGAAGAG GCTGCCTACT TGGTATCAAG 60  
ACTGAAGGAG AACTACGTT TGCTGAGCAC TGATGGCCCT GGGAGGAACA TCCTGAAGTT 120  
TAAGCCCCCA ATGTGCTTC GCCTGGACAA TGCACGGCAG GTGGTGGCAA AGCTGGATGC 180  
CATTCTGACT GACATGGAAG NGAAGGTGAG AAGTTGTGAA ACGCTGAGGC TCCAGCCCTA 240  
AGCCAGCCCT GCTCTGCCTA AGTGTACTCC AGAAGAAACT CATCTCATCC AAATACACGC 300  
TATTGAGAAG GCGAGCCTGA CCTCCCTCTT ACAGATAAAAG TCAGCTTCA GAGGCTCAGG 360  
GTGGGGGGGC CTGCCGAGG CCATAATGCT ACCCACCN 398

SEQ ID NO:2838

LENGTH:408

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03379

SEQUENCE DESCRIPTION:

GATCGCACAC ATGCTTGTT TGGAATATGG AGTGAACACA ATTATGTACC AAATTTAATC 60  
TGGCAAACCTT NCTATTGCCT GTCCCAGTGTG CATCTNATT AAAATTTCCC CCATGGAAAT 120  
CACTCTCCGT TTGACTATTT CCAGAGCTCT AGGTGTTTAG GCAACGTGTG GTGTCTGAG 180  
ANGGCCATAG CGCCATCATG GGCTGATTTT AATTACCAAGG TCCCCCAGAA GCAGGTGGGA 240  
GGCTCTGCTT CCTGCTGGCC GTTCTGCAGC CTGGACCTGT GGACCTGTTG TGAAAGNGT 300  
AAATTGTTTT CTTANGAAA CCAGTGTAC CTTNTNTNAA CCTTTAAANT TTAAAAATAN 360  
TTTGGGGAA NAAATTNCNG NNACNGGAGG GTTAAAATTT ANCNNANN 408

SEQ ID NO:2839

LENGTH:388

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03380

SEQUENCE DESCRIPTION:

GATCCACCAG CTGAGCAGGG CGGGGCTGAG TAAATGCCGG CTTACCATCT CTACCATCAT 60  
CCGGTTTAGT CATCCAACAA GAAGAAATAT GAAATTCAG CAATANGAAN TGAACAAAAG 120  
ATTGGAGCTG AAGACCTAAA GTGCTTGCTT TTTGCCGTT GACCAGATAA ATAGAACTAT 180  
CTGCATTATC TATGCAGCAT GGGTTTTTA TTATTTTNAC CTAAAGACGT CTCTTTTG 240  
TAATAACAAA CGTGTGTTT AAAAAGCCT GGNTTTCTC AATACGCCCT TAAAGGTTT 300  
TAAATTGTTT CATATCTGGT CAAGTGAGA TTTTTAAGA ACTTCATTT TTAATTNGT 360  
AATAAAAGTT TTNCAACTTT GATTTAN 388

SEQ ID NO:2840

LENGTH:80

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03381

00998

2153480

SEQUENCE DESCRIPTION:

GATCTTGCTG AAAGTGTTC TAAAGATAGC ACCACTTTT TTTTNAAGC TTTTATATAT 60  
NAAAAAACGT ATCATGCAA 80

SEQ ID NO:2841

LENGTH:384

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03382

SEQUENCE DESCRIPTION:

GATCTTGCTC TAGCCTTTN ACTTTGCAA TTTCAGTATC TTCATCTCTA AACTAGGGAA 60  
ACACTNGGAT TCTTCTTAG CTGTGGGGGA AGGTATTG TGAGATGACT TTGAATGAAT 120  
AGACTGCTGT GCTGAAAGAG CTTTATCACA CTGCTCAAA GTATGAAAG ATACATAGGT 180  
GGATGCTCTT ACTGCAGCAG TCATGAATAAC ATTTTAGCC ATTACCTAA GGAAAAGAC 240  
AGTTTTCTA GGTACCATGA AGGAAGATTG ACCCTGTTGG TATGCCGTG GGGGTGGGAT 300  
GTGAGTGGGA CTGATAAACT GATACTTTG GTTCGTATGT ACATACTGGN AGAATCTTCA 360  
TANTAAATGN GACTACACAA CAAA 384

SEQ ID NO:2842

LENGTH:376

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03383

SEQUENCE DESCRIPTION:

GATCCAGGGC AAGGCATTG GGATATTCTG AAACTTGAAT ATTTGTTT GTGCAGAGAT 60  
AAAGACCTT TCCATGCACC CTCATACACA GAAACCAATT TTNTNTNTNA TACTCAATCA 120  
TTCTAGCGC ATGGCCTGGT TAGAGGCTGG TTTTTCTCT TTTCTTGG TCCTCAAAG 180  
GCTTGTAGTT TTGGCTAGTC CTTGTTCTT GGAAATACAC AGTGCCTGACC AGNCAGCCTC 240  
CCCCGTCCC CTCTATGACC TCGCCCTCCA CAAATGGAA AACCAAGACTA CTTGGGAGCA 300  
CCGCCTGTGA AATACCAACC TGAAGACACC GTTCATTAG GCAACGNACA TAACAGNAAA 360  
TGAAGGTGGA CANGCN 376

SEQ ID NO:2843

LENGTH:370

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03384

SEQUENCE DESCRIPTION:

GATCCAAAC CTAGCCCCCT AGTGGGACAA GGACCTGACC CTCCCTGCCG CATAACAAAC 60  
CCATTTCCCC TGGTGAGCCA CTTGGCAGCA TATGTAGGTA CCAGCTAAC CCCACGCAAG 120  
TTCCTGAGCT GAACATGGAG CAAGGGGAGG GTGACTTCTC TCCACATAGG GAGGGCTTAG 180  
AGCTCACAGC CTTGGGAAGT GAGACTAGAA GAGGGGAGCA GAAAGGGACC TTGAGTAGAC 240  
AAAGGCCACA CACATCATTG TCATTACTGT TTTAATTGTC TGGCTTCTCT CTGGACTGGG 300  
AGCTCAGTGA GGATTCTGAC CAGTGACTTA CACAAAAGGC GCTCTATACA TATTATAATA 360  
TATTCGCTTN 370

00999

2153480

SEQ ID NO:2844

LENGTH:367

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03385

SEQUENCE DESCRIPTION:

GATCTGTAT CTGGTGCTGC CAGCTGTGCT CACTCTGGTT TTCTGCTCAG GGTCTGAAGC 60  
AGCTGCTGTC TNCCCTCTCT GCCTCCATCC CCTGGCTCTC CCCTGGGCAC AGTGCCACTC 120  
CCTTGGAAAGG GAGGGAAACCA CCCGTNAGCC CCAGGGCTTG GNAAGCCTGA GGCGGTGNCT 180  
CTGCCTCTCC CTGCCCCCAG CACAATTGGC AGAGATGAGG CGGGTGGTGG ACGGCTGGGG 240  
GTGTCGTGGC AGGGTCTNGC ACAGGGNCAT GTCCTGGCTG TAACCCAGGC AGTGGGAGGT 300  
CTGCAAGCCT GGTATGGCC TTCACAGCAN GGTNCCTGTT GGACAGACAT ATCTGNATAT 360  
TTATNAA 367

SEQ ID NO:2845

LENGTH:366

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03386

SEQUENCE DESCRIPTION:

GATCTCCAAC ACTATCCGAT AAAGTAGAAG CAACTGAGGT ACCGTGAAAG AGAAAGGAGC 60  
TGGAACTGAG AAAAACGAGA GGATTCGGAC GGAGAGCGCG AGGACTCGGC GGCTGAGCGC 120  
GCCCGACAGC AGCTAGAGGC GCTGCTCAAC AAGACTATGC GCATTGCGAT GACAGATGGA 180  
CGGCACACTGG TCGGCTGCTT CCTCTGCCT GACC GTGACT GCAATGTAT CCTGGGCTCG 240  
GCGCAGGAGT TCCTCAAGCC GTCGGATTCC TTCTCTGCCG GGGAGCCCCG TGTGCTGGGC 300  
CTGGCCATGG TACCCGGACA CCACATCGTT TCCATTGAGG TGCAGAGGGA GAGTCTGACC 360  
GGGCCN 366

SEQ ID NO:2846

LENGTH:365

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03387

SEQUENCE DESCRIPTION:

GATCCCCCA AGGNGAAGTG TGAGACAATG GTCTATCACCC CCAACATTGA CCTCGAGGGC 60  
AACGTCTGCN TCAACATCCT CAGAGAGGAC TGGAAGCCAG TCCCTTACGAT AAACCTCCATA 120  
ATTNATGGCC TGCAGTATCT TTNCTTGGAG CCCAACCCCG AGGACCCACT NAACAAGGAG 180  
GCCGCAGAGG TCCCTGCAGAA CAACCGCCGG CTGTTTGAGC AGAACGTGCA GCGCTCCATG 240  
CGGGGTGGCT ACATCGGCTN NACCTACTTT NAGCGCTGCC TGAAATAGGG TTGGCGATA 300  
CCCACCCNNG GCCACGGCCA CAAGCCCTGG GCATCCCCTG CAAATANTTN TTGGGGGGCC 360  
ATGGN 365

SEQ ID NO:2847

LENGTH:364

01000

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03388

SEQUENCE DESCRIPTION:

GATCTAGAGT ATGTTGAAGA AGATGGACAT GTGGTGGTAC GAAAACAATT CCCCTGTGGC 60  
 CTGCTGGACT GGGTGAACC AGAACAGGCT AAGGCATACA GTTCTGACT TTGGACAATC 120  
 CAAGAGTGAA CCAGAATGCA GTTTCCCTG AGATACCTGT TTTAAAAGGT TTTTCAGACA 180  
 ATTTTGCGAGA AAGGTGCATT GATTCCTNAAA TTCTCTCTGT TGAGAGCATT TCAGCCAGAG 240  
 GACTTTGGAA CTGTGAATAT ACTTCCTGAA GGGGAGGGAG AAGGGAGGAA GCTCCCATGT 300  
 TGTTTAAAGG CTGTAATTGG AGCAGCTTT GGCTGCGTAA CTGTGAACTA TGGCCATATA 360  
 TAAN 364

SEQ ID NO:2848

LENGTH:363

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03389

SEQUENCE DESCRIPTION:

GATCTGGGGA GGCAGGCATT CCTGAAGGGA ACTAGAGGTG TTACAGAGGA CCCTTACGTG 60  
 AGAAAATAGCT GAAAAGGGCA CTCGCAACCC TGGGCTGGGG AGGAGGGAGAG AGTCCCAGAG 120  
 CTCATCCCC CTGCTGCCA GTGCAAACCA CTNTCCATG CTGCAAAGGA GAAGCACAGC 180  
 TCCTGCCAGG GTGAGCAGGG TCAAGCCTCT TATTCCAGGA GAAGGGGGCT CTGCCAGGC 240  
 CCTACTACCN ATTGTNCCT TCCTCTTCCG GCCCTTGAA CCCCTNCCT GTCCCAGGGC 300  
 CCTTCNAGCC CATTGCGCC AAGGTGGAGG GANGGATAAA GNCACTTCTG GGTTTGAAAG 360  
 CCN 363

SEQ ID NO:2849

LENGTH:361

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03390

SEQUENCE DESCRIPTION:

GATCTGGGTG TGGCCAAAAA CAATTTNTT TATTCTGTCT ATCAAATAGT ACTTCTACCA 60  
 CTGTTGGAG AAAATTGAAG AAAAGAATAA GATGATTAAA TGAATTCTCT AAAAGAACAT 120  
 ATTTTAAGAG ACAGAACTTA GACATAACCA AGTAGTTGTA TACCTGATG TAACAATCAT 180  
 CTTTTATAAA AGCAAAATTA TGCAATAATG TAAAACACCC CTAACAAAG GGAACAAATG 240  
 ANTTTTGGT TATATTGTT TCTGGCTCA AAGTATCAAT TTATTATTAT AATAGAAATT 300  
 TATAAGTTGC TAGAAAGTCT ATATTTTAA CGCACGGAAT AAAANTATGT TTTCTATTAA 360  
 A 361

SEQ ID NO:2850

LENGTH:355

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03391

**2153480**

**SEQUENCE DESCRIPTION:**

GATCTGTCTC CAAGACCTTG GCCTCTCCTT GGAGGACCTT TAGGTCAAAN TCCCTAGTCT 60  
CCACCTGANA CCCTGGGAGA NAAGTTGAA GCACAACCTCC CTTAAGGTCT CCAAACCAGA 120  
CGGTGACGCC TCGGGGACCA TCTGGGCAC CTGCTTCCAC CCGTCTCTCT GCCCACTCGG 180  
GTCTGAGAC CTGGGTTCCC ACTGAGGCC C TTGCAAGGAT GGAACACTACGG GGCTNGNAGG 240  
AGCTTTGTG TGCTGGTAG AACTATTTC TGTTCCAGTC ACATTGGCCA TCACTTTGT 300  
ACTGNCTGCC ACCGNGGAGG ANNCTGGTGA CAGGNCAAAG GCAGTGAAG GAAAN 355

**SEQ ID NO:2851**

**LENGTH:344**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS03392**

**SEQUENCE DESCRIPTION:**

GATCTAGITC TACGTATTAC ACAGGTGTA TATCTGTGAG TGTAAATAAC TGGAACGTGA 60  
CACTGATTA CATGNCAAGTT TCTCTTTGT TGTTCTTATC TGTACTGTAT TATAGTATGT 120  
GGGTATAAAAT ATCTACAAGT ATACACACAT ATGTNCTNGT ATTCCACTAT TGTAACCTGG 180  
AAGAAAGACT ATGNATNCCC TNTNNAAATT CCGTACTGGT ATTNGTGTAA TTAAAAAGC 240  
AAAATNCGGC TCTATTTAGT TGTATAATAT TAGAGGGTAC TNNGCTTGNN CACAATTCCA 300  
AGTGGCCTTA GAGCATTGTT TAGCTNNCCG AAGTATATAT AANN 344

**SEQ ID NO:2852**

**LENGTH:341**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS03393**

**SEQUENCE DESCRIPTION:**

GATCTATGAG CCTGTNTNGG ACAGCCAGAT GGTCACTATA GTCACGGTGG TGTCGGTNTT 60  
GCTGTCCCTG TTCGTNACAT CTGTCCTGCT CTGCTTCATC TTGGGCCAGC ACTTGCGCCA 120  
CNGCGGATGG GCACCTACGG GGTGCGAGCG GCTTGGAGGA GGCTGCCCA GGCCTTCCGG 180  
CCATAGCAAC CATGANTGGC ATGCCACCA CCACGGTGGT CACTGGAAC NAGTGTGACT 240  
CCTCAGGGTT GAGGTCCAGC CCTGGCTGAA GGACTTGTNA CAGGCAGCAG AGACTTGGGA 300  
CATTGCCTT NNTAGCCGA NTACAAACAC CTGGACTTAA A 341

**SEQ ID NO:2853**

**LENGTH:567**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS03394**

**SEQUENCE DESCRIPTION:**

GATCTCAAGA CCAAGACAG ATGTCAGTGG GCTGCTCTGG CCCTGGTGTG CACGGCTGTG 60  
GCAGCTGTTG ATGCCAGTNT CCTCTAACTC ATGCTGTCT TGTGATTAAA CACCTCTATC 120  
TCCCTTGGGA ATAAGCACAT ACAGGGCTAA GCTCTAAAGAT AGATAGGTGT TTGTCTTTT 180  
ACCATCGAGC TACTTCCAT AATAACCACT TTGCATCCAA CACTCTTCAC CCACCTCCCA 240  
TACGCAAGGG GATGTGGATA CTTGGCCCAA AGTAACGTGGT GGTAGGAATC TTAGAAACAN 300

**01002**

GACCACTTAT ACTGTCTGTN TGAGGCAGAA GATAACAGCA GCATCTNGGN CCAGTCTCTG 360  
 CCTTAAANGG AAATCTTAT TAATCACGNA TGGTTCACAG ATAAATTCTT TTTTAAAAA 420  
 AANCCANNC TCCTNGGGAT GCACANCCTG TCAAGNGTCT TTTTACACAC AANTTCAGG 480  
 TTNNCATCA CGGGCCTTG ANTTCNAGGA AATNAAAGGN GGGACAAATT TNGTTNGTT 540  
 ACNCTATGGT NCTTNNTAA NAAACNN 567

SEQ ID NO:2854

LENGTH:349

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03395

SEQUENCE DESCRIPTION:

GATCTTACT TTTTACTTT TTATTCATCT TTGTGTTTT ATTATCTAA AATGGGTATT 60  
 GATTTAAGG ACGGTTTGAA AAAAGAAAAG TGTGGGAAT GAAGCAAGTG ATTGATTGGA 120  
 AACACATACTG AATGGAAGAA ATATTTAGAT TAAAAATGAG GTAGGTTGAA GTTCTNCTC 180  
 TGAAATNATA GATAAATGGT GAAGATAAGG CTTATTGTGA GGNTTCAGTG AGGTAATATA 240  
 TGCAAAGTAC TTACAATGTT CTGGCACATA GTAATTNATT NNGANAATCG AGCACCCCTA 300  
 ATTACCTAGA ATGCAGGGTT GTTAGTTTT NGGTTGACTT TTGTTTTNN 349

SEQ ID NO:2855

LENGTH:334

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03396

SEQUENCE DESCRIPTION:

GATCCGCTGT ATTGTGGAGT ATCAGAACAA GGGCCGCGGG AACGAGNGCG TGCAGTACCA 60  
 GCATGTGTTA CATAGAACAT TCATTATTT GGCTACCATT GCAGATGCCA GTCCAACCAAG 120  
 CACTTCAAAA GCAATGGAAT AATCTTCAA AAGCAATAGA ATAATCTTCC ATTGGCTGT 180  
 CGTGAGGAGT AATTGAATGT AATCCATCTC TTACAAAATG GAGACAGGGT CTTTACCAAC 240  
 TCAACTGGTT AAAACATGAN TGAAACCTCT GTGGCTCTT CAAAACGTGG AAAATGTGAA 300  
 GAANGCTACT TAACTTNGGC TGTATTCTCA TGGN 334

SEQ ID NO:2856

LENGTH:332

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03397

SEQUENCE DESCRIPTION:

GATCGGCCTG CTGCTCCGCA ACTTCGACCG CTACGGCGTG GAGTGCTGAN GGACTCTGCC 60  
 TCCAACGTCA CCACCATCCA CACCCCGGAC ACCCAGTGAT GGGGGAGGAT GGCACAGTGG 120  
 TCAAGAGNAC AGACTCTAGA GACTGTAGA GCTGACCCCA GCTAAGGCAT GGCACCGCTT 180  
 CTNTCCTTTC TAGGACCTCG GGGTCCCTCT GGGCCCAAGTT TCCCTATCTG TAAATTGGGG 240  
 ACAGTAAATG TATGGGGTCTG CAGGGTGTG AGTGACAGGA GGCTGCTTAG CCACATGGGA 300  
 GGTGCTCAGT AAAGGAGAGC AATTCTTACA AA 332

SEQ ID NO:2857

LENGTH:331

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03398

## SEQUENCE DESCRIPTION:

GATCCTGGGT GTNTNTGTA GGTTNTGCC AAAGGAGGTT AACATTGGAC TCANTGGCT 60  
 GGGGAAAGGC AGACCCACCC TTATCTGAG TGGACACCCT CTAATCAGCT GCCAGCGAAA 120  
 ATAAAGCAGG CAGAAAANTG AAAAANNTAG ACTGGCCTAG CCTCCCAGCC TACATCTTN 180  
 TCCCCATGCTG GATGCTTCCT GCCCTTGAAA ATTGGACTCC AGGTTCTNA GTTTGGGAC 240  
 TTGGACTGGC TCTCCTTCCT CCTCAGCCTG CAGACATCCT ATTGTGGGAC CTTGTGTTTC 300  
 TGTAAGTTCA TACTTAATAA ACTCTCCATA N 331

SEQ ID NO:2858

LENGTH:351

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03399

## SEQUENCE DESCRIPTION:

GATCGAGTCT ATACGCTGAA GAAANNTGAC CCGATGGGAC AACAGACCTG CTCAGCCCAT 60  
 CCTGCTCGGT TCTCCCCAGA TGACAAATAC TCTCGACACC GAATCACCAT CAAGAAACGC 120  
 TTCAAGGTGC TCATGACCCA GCAACCGNGC CCTGTCTNT GAGGGTCCTT TAAACTGATG 180  
 TCTTTCTGC CACCTGTTAC CCCTCGGAGA CTTCGTAACC AAACNTTCTG GACTGTGAGC 240  
 CCTNATGCCCT TTTTGCCAGC CATACTTCTT TGAGCATCCA GNNTNTNGT GCGATTGAT 300  
 TATGCTTGTGTT GTGAGGNAAT CATGGGTNGG CNTCNNCCNT TAANGGGTG N 351

SEQ ID NO:2859

LENGTH:330

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03400

## SEQUENCE DESCRIPTION:

GATCCTGGGG GCCTGGTTG GGGGCTAGGG AGACGCCATG TGATGGACAC TCCAGGGACA 60  
 CACAGCCTAG CACAGCAGCT TATAATGGGC TCTCCGGGGC CATTGCAAT AACAGCTGCA 120  
 ATTCCCTGGA TAGACCGAGTT GATTTCTCC CTCTGCCCT CCCCCAGCCA TGCCAGCTGG 180  
 CCTTTGTAAG TGCAGGAAAC CGAGTAGAAA ATGTGACCCCT CCAAATGGAG AAGCTGCAGG 240  
 CTTTGCCATT GTGAACCATG GTGAAGTGCT TGGAACATAC TGTTCACTCA CTCTAAAGGN 300  
 GCTGAGACTG TGCTGTTCTCGTTTTTN 330

SEQ ID NO:2860

LENGTH:330

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03401

## SEQUENCE DESCRIPTION:

GATCTGGAAA GGACATGACT TCTGAAATAG CCGCTGCTGG GTTTAAAAG CTGAGGTCTC 60  
 TCAAAGTGTG GAGGAGACGT TGCCGTCAGN GGGAGCCAAG TGCCGGGAAG ATGTCTATT 120  
 TTTTCCTTGT GTATTGAAAA TCATGATGTT TGTTATGACT GCTGATGCCA TTGTNTTGT 180  
 AAATNTNATT GTGGCATATA CAGTATTGTC ATACAGTTGA AGAGAAACAA TGTTCCCAA 240  
 TGTAAGTNTCT CTGAAAATGT TGACACTGTA TATATATATA TNAGGATAGT TTGTNTTCN 300  
 NTGTTGGGG TTTNNNNNTN TTTCNGNTGN 330

SEQ ID NO:2861

LENGTH:396

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03402

SEQUENCE DESCRIPTION:

GATCTTAAAC CCAAAGTACG AGAAATGTTT CTGTTGAATG TAATGCTACA TGAATGCTTG 60  
 ATTTATCAAG CGCCAAAAAG GCATTGTATA GTAGGAAATG TAAGTGGGGT GGCTTATGGC 120  
 TTCTTTATCC TCTGATTCTA GCACTTCAA GTGAGCTGTT GCGTACTGTA TCATATTGTA 180  
 GCTATTAGGG AAGAGAAAGAA TGTGCTTAA GAAAGAACAT CACCATTGAT TTTAAATACA 240  
 AGTAGCAGGG TATTGCCTT GATTCAACTG TTTAAGTCC TCATTTTCT CAAACTAAGT 300  
 GCTTGCTGTT CCCAAATATG GCAAGGNATA GCTTTACAC TTTTCCCTG CCAACANNTC 360  
 NTNGATTGGC TTTGCAGANA TNNAGGTTG ANTTGN 396

SEQ ID NO:2862

LENGTH:330

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03403

SEQUENCE DESCRIPTION:

GATCCAAAGT GACCCACCA GGGGACAGCC AGAGGAAGGG GACCAGGGG TATCCNNAGT 60  
 GTCCTGGTCT ATCACCCCCAG CTTCTTGTC CCCCAGTACC CCCAGCCAG CCAGCCAATA 120  
 AGAGGACACA AATGAGGACA CGTGGCTTT ATACAAAGTA TCTATATGAG ATTCTTCTAT 180  
 ATTGTACAGA GTGGGGCAAA ACACGCCCC ATCTGCTGCC TTTCTATTG CCCTGCAACG 240  
 TCCCATCTAT ACGAGGTGTT GGAGAAGGTG AAGAACCCCTC CCATTCACGC CCGNCTACCA 300  
 ACAACAAACG TGCTTTTTC CTNTTGAAA 330

SEQ ID NO:2863

LENGTH:329

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03404

SEQUENCE DESCRIPTION:

GATCTTATTT TCTGAGAAAT TGATAGCAA TATGCCAGAA AGTGGACCTA GTTATGAATT 60  
 CCATCTAACCC AGACAAGAAA TAGTATCATT ATTCAACGCA TTTGGAAGAA TTTCTACAAG 120  
 TGTGAAAGAA TTAGAAAATC TCAGGAACCTT GTTACAGAA ATTCAATTAA GAAAACAAGC 180  
 TGATATGTGC CTGTTCTGG ACAATGGAGG CGAAAGAGTG GAATTCATT CAAAGGCATA 240  
 ATAGCAATGN CAGTCTTAAG CCAAACATT TATATAAAAGT TGCTTTGTA AAGGAGAATT 300

ATATTGTTT AAGTAAACNC ATTTTAAA

329

SEQ ID NO:2864

LENGTH:329

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03405

## SEQUENCE DESCRIPTION:

GATCACTTCA GCTGCCCTGCT GTGGACAAAG AACATCAAAT TACAGCATCA CGAGTGCTAT 60  
 TNNTGCCCTGT GGTGGCTCTCC CTGTCGAAGC GGGNCCGCTT TGCGAGAGACC AGAGGCATAT 120  
 CGCGGCTTGA GCTGAAAATG CATTNTTGCG AGCTTAGGTT GAATTATTT NC GTTGCTC 180  
 TTTCTTCTAC ACGCGCCCTGA TGGATAGTGA ACCTATTCA CAAAAAAAGTG CACTGCTCN 240  
 CTGTCTATTG TACCGACTTA ACCTCTTCCA CCCAAGTCCG CATCTGTGTG TATCATCAAT 300  
 AAAGTTGGTN GTGCCCTTGGN TTGGGCAAA 329

SEQ ID NO:2865

LENGTH:328

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03406

## SEQUENCE DESCRIPTION:

GATCGGGCGTG ACCACCCCTT GCCCGGAGGTG GCCCATGTNA AGCACCTNTT TGCCAGGCCAG 60  
 AAGGCAGTGA AGGAGAAAGGA GAAGGCCTCC TGGAGCAGCC TCTCCATGGA TGAGAAAGTC 120  
 GAGTTGTATC GCATTAAGTT CAAGGAGAGC TTTGCTGAGA TGAACAGGGG CTCGAACGAT 180  
 NTGGAAGACG GTTNTNGGGC GGNTCCATGT TCTTAAATCG GTTTAACGT GCTCGTTNCC 240  
 CCTNTGGAAA AAGGNCTNT GTTTACCGGC CCCCTCCCG AAAAGTTTN ACAAAANGT 300  
 GGGGTTGCCA AAGNAGGCCA AANAGGNN 328

SEQ ID NO:2866

LENGTH:327

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03407

## SEQUENCE DESCRIPTION:

GATCTACAGA GTTAGAAATT CGAAAACAT TCCAGGACTA ATTCTTAATC GGCATTATTT 60  
 ATACAAGAGG TCAAGTAACA TTTACTAGCG CAATACTGCA CTTGTAATG AATTATAAAC 120  
 GCTCTTCTGG AATATATTAA AATAACCATT AAAGAACTGC TTATTCAATNC TGGACACTGC 180  
 ATGTNGATGT TGAATCAACT GATGCCAGCA GAAAGCTATT TTGATTTGTG AACATACTGC 240  
 CTTATTTAAA GGGTCCTGTAT TGCTTGTATT TTANGNCATT CATTAAAAAG AAACCAGGAA 300  
 ACACCTTTGA ANTAACACCA TANGGGN 327

SEQ ID NO:2867

LENGTH:327

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03408

## SEQUENCE DESCRIPTION:

GATCACCCCTC CTCCCCAAA GCAAGAGCTT GTTTATGGCT GAGGAATCGG CGGATTGTCT 60  
 GAATGACACA TATACAGAGC CCCCACGGAT TTCTNCACAC TCTGGGTCTG TGCTGGTGG 120  
 ACATTGCCAA TNAGTTCTTA ATGAGGCACC TGTGTGAAA TACATGCTTG GTCTTCTCTG 180  
 CAGAGAACCTG AGGCTAAACT CTGTCCCTAC TTCTGGTTT GCCCTGTNAT GTCGTAACGA 240  
 GGTGGGCCTT TTGAGGCCAT TTTAGTTGA GTTCGAGCCA ACCACCTCTG GTTGGTTAGA 300  
 TGATTGAATA AAAAGTTCT GAAGAAA

327

SEQ ID NO:2868

LENGTH:326

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03409

## SEQUENCE DESCRIPTION:

GATCCAATCA CCTCCCACCA GGCTCCACCT CGAATACTGG GGATTACCAT TCAGCATGAG 60  
 ATTTNGGCAG GAACACAGAC CCAAACCATA CCACACACAT TATCATTGTN AAACTTTGT 120  
 AAGTATTTAA GGTACATGGA ACACACGGGN AGTCTGGTAG CTCAGCCCAT TTNTTTATTG 180  
 CATCTGTNAT TCACCATGTA ATTCAAGGTAC CACGTATTCC AGGGAGCCTT TNTTGGCCCT 240  
 CAGTTGCAG TATACACACT TGCCANGTAC TCTTGGTAGC ATCCTGTTG GTATCATNGC 300  
 ACTGGGTAC ATTGCCTTAC CTAAAN

326

SEQ ID NO:2869

LENGTH:325

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03410

## SEQUENCE DESCRIPTION:

GATCTATGGA ACAGAGGAGG AGCGATGCAG TTGGGAGAGG AAGCTAGAAG GGTTATGGTT 60  
 GGAGTTCTGT ACAGTGTGTA GTTCCGACA GGGAAAGAGG ATTCCCTCAA TGCGCCTAGA 120  
 GAGAAAGCCT GAGCAGGAGA TGATGCAGCA GAGGGGAAGG GCCCTGTGGT GCCGCCGCC 180  
 TTCCTTCAGC CTCCGAAGGT GATGAAATG GAGAGTGGAG GACCAGGCCT CCAGCTGTNT 240  
 GGCTTNGCCN TTCACGCCCT AACACTAAGC CCACCTCCCC TTNTCTCCTT CCCAGCATTG 300  
 AGCCCTTGGT TGCCTGGGCC CAGGN

325

SEQ ID NO:2870

LENGTH:325

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03411

## SEQUENCE DESCRIPTION:

GATCTTCAGA AACCTTGCTA GGAGAAGTTA ATGAAAATAG AGTATCAATA GCATTGAAAA 60  
 AAACCTCTGA AATCCTTCAC GATATTGACT GTCTTCTATC AAACTCTAAA AAGTGAAGAA 120  
 TGGAAATTATT ACAACATATT ATTAAGTTT AAGGATGTTG TTTCAAGTGA CTGGTATAAA 180  
 ATTACTAGTA AGCCAAGATA TTGTACGTAT TACCCCGGCA CAATGATTGT GAAAGANCTG 240

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ACATTTAACT TTGAAGGTAT TTTTAACCTG TACATTTTA AAATATGTAT TTATATCTNA 300  
NTANTAAATN TTTCGAAGTT TTAAA 325

SEQ ID NO:2871

LENGTH:325

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03412

SEQUENCE DESCRIPTION:

GATCCAAGCG GAGATTGACG CTGCAGCGGA NACTCATCGA CTTCTTCCGG TTCAATGCCA 60  
AGNATGCGGT GGAGCTGGAG GGGCAGCAGC CCATCAGCGT GCCCCCGAGC ACCAACAGCA 120  
CGGTGTACCG GGGTCTGGAG GGCTTCGTGG CGGCCATCTC GCCCNNTAAC TTCACTGCAA 180  
TCGGCGGCAA CCTGGGGGG GCACCGGCC CGTGCTTCG AGAGGGAGTT GTGACTCTGC 240  
CTCTTGCCA GATGACAAAA CTGAGACACA CAGCCGTGAC TTACTGGCA AGACTGAGTG 300  
ACTAGTAAAT AAATGATGGA GCAGN 325

SEQ ID NO:2872

LENGTH:323

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03413

SEQUENCE DESCRIPTION:

GATCCTCCTT CTAGCTCATC TGTTAGATACT AGTAGTAGTC AACCAAAGCC TTTCAGACGA 60  
GTAAGACTTC AGACAACATT GAGACAAGGT GTCCGTGGTC GTCAAGTTAA CAGACAGAGA 120  
GGTGTGAGCC ATGCAATGGG AGGGAGAGGA GGAATAAACAA GAGGAAATAT TAATTAANTG 180  
GTCTGTAAAC AATAACAACG GTGAATAAGA TTATCAAATC TNTTTAGTG TAATGATTGT 240  
CAAGTTAAA ANCATTNTN TATATAACCT GGTATACTCA TGTCAATATN CTTTATTAAT 300  
AAAANGNTT TCAGTGTCA AAA 323

SEQ ID NO:2873

LENGTH:322

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03414

SEQUENCE DESCRIPTION:

GATCTGCCCA TCTCACGCC CCAAAGTGCT GGGATTACAG GTATGAGCCA CAACGCCCAN 60  
CCATCATTTA TCTTTTCAC TCATTTTTC ATGAGTATGC AGAGGGAGTT TCAAGAGGCT 120  
ATCTGGTGTG ATATTGTAAT AGGCTGAATG CAAAAGCAGA TACAAGATTC CAGCTTCGT 180  
CTGTCACTAG ACATTTGAAGA GATTTGGAGA AATGAAAGC AGCAGTACTC TTCTCACTAA 240  
TTTTGTTGT GGTTAGTTAG AAAAATGGTT ATTTTNAGTG GGTTTAATA TGTGAAAAAA 300  
ATAAAATTAG CTATTTGCCA AA 322

SEQ ID NO:2874

LENGTH:319

TYPE:nucleic acid

01008

TOPOLOGY: linear

CLONE: HUMGS03415

SEQUENCE DESCRIPTION:

GATCACCTNT GGC GTGTTCC TNCCAAAACN GCATAGCCCC AATCTAATAT CATCCGAGG 60  
 AAATACCAGA CACACGCAAG GGAAAGGACA TTCTACAAAG GAACGGACTC ATACTCTTCG 120  
 AAAAGTGTCA AGGTCATCTA CGACAAAAGA CTGAAAGGAC CCCAGTCGAA AAAAGNCAAG 180  
 ATGACAAANT GCAACGTTTC ATCCTAGACT GGATTCTGGA CCCAAAAAAT CCCCTCTTT 240  
 TGTCAAGAAAG GAAATTGTG GAACAACCTGG CAAAATCTGG AGTTGGGTCT GCAGATTACA 300  
 CACTGGTATC GCAGCGAAA 319

SEQ ID NO: 2875

LENGTH: 320

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS03416

SEQUENCE DESCRIPTION:

GATCTCCCTT CGTGGAGACG ACACCGGGGT CCTCCTGCC ACCCCAGGGG AGGCCAGGA 60  
 TGCTGATTG AAGGATGTAA ATNTNATTCC AGCCACCGCC TGACCATCCG CCATTCGAC 120  
 TGCTAAAAGC GAATGTAGTC AGGCCCCTTT NATGCTGTGA GACCTCTGG AACACTGGCA 180  
 TCTNTGAGCC TCCAGAAGGG GTTCTGGGCC TAGTTGTCCCT CCCTCTGGAG CCCNGTCCTG 240  
 TGGTCTGCCT NAGTTTNCC CTNCTAATAC ATATGGCTGT TTTCCACCTG GNTAATATAA 300  
 CCANGAGTTT GGGCCGNAAA 320

SEQ ID NO: 2876

LENGTH: 308

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS03417

SEQUENCE DESCRIPTION:

GATCTCTGCT GTGNCTCCA GAGTTACTGC TGCCAGACTG AACTGGAAGG GGAGGATGTA 60  
 GGAGCCTGCA CAGCTCACAC CTACTCCTGT GGCTCTGGAG TGGGCATCTN CCTGAGAGTA 120  
 CGGGAATGTN AGGTGTATT TTAAGCTGGC AAAACCAAAG GCTGTTTNA TTCTCCTCCT 180  
 TACCTTGATG ACTATGGGGA GACCGACCAG GGACTCANAC GGGGAAATCC TTTACATTAA 240  
 TGCAAAGAGC GATTCAAGAA GATTCAAGAG CTCTGGCACC AACACAGTGT CACAGNGGAA 300  
 NTTGGNCN 308

SEQ ID NO: 2877

LENGTH: 308

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS03418

SEQUENCE DESCRIPTION:

GATCTTGACC ATGACAGTTT TNCACTTTA ATGAAACGGG GAACCAAGAG GAACTTACTT 60  
 GTGTAACCTNA CAATTNCTGC AGAAATCCCC CTTCCCTCTAA ATNCCCTTA CTCCACTGAG 120  
 GAGCTAAATC AGAACTGCAC ACTCCNTCCC TGATGATAGA GGAAGTGGAA GTCCCTTAG 180

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GATGGTGATA CTGGGGACC GGGTAGTGCT GGGGAGAGAT ATTCCTTAT GTTTATNCGG 240  
AGAATTGGA GAAGTGATTG ACCTTTCAA GNCATTGGGA AACAAATAGA NCACANTATA 300  
NTTTNNCN 308

SEQ ID NO:2878

LENGTH:307

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03419

SEQUENCE DESCRIPTION:

GATCTAGAAG ACGATTAAGG GAAGGTCGTT CTCAGTGAAA ATCCAAAAAC CAGAAAAAAA 60  
TGTATACA ACCCTAACGTC AATAACCTGA CCTTAGAAAA TTGTGAGAGC CAAGTTGACT 120  
TCAGGAAC TG AAACATCAGC ACAAAAGAAGC AATCATCAAA TAATTCTGAN CACAAATTAA 180  
ATATTNNNN TNCTGAATGA GAAACATGAG GGNAATTGTG GAGTTAGCCT CCTGTGGTAA 240  
AGGAATTGAN GAAAATNTAA CACCTTACAC CCTTTCCAT CTTGACATTA AAAGTNCTGG 300  
CTAACTN 307

SEQ ID NO:2879

LENGTH:307

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03420

SEQUENCE DESCRIPTION:

GATCTTGAGG GCAGACAGCA GAATTCCCTCT TATAAAGAAA ACTNTTNGG AAAATACGTT 60  
GAGGGAGAGA NGACCTGGG CCAAGATGCT AAATGGGAAT GCAAAGCTG AGCTGCTCTN 120  
CAAGAGAAAA TAAGCAGGNC AGAGGATTN CTCTGGACAG AGATGGAAGA GCCGGGAACA 180  
GAGAAGTNTG GGGAAAGAGAT AGGAACCCAGC AGGATGGCAG GGGNNNNNGG CTCAAGGGTN 240  
AGGAGGCCAG TGGGACCCCAGAGTTNGG GGAGATAAAG GAACATTGGG TTTGCTTTGG 300  
TGGCACN 307

SEQ ID NO:2880

LENGTH:305

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03421

SEQUENCE DESCRIPTION:

GATCTGCCGT GTCCTTATAA AGTGGATGAA AAATGTTTG TACCCATCTG GAAAACCAAC 60  
AACTGAAAT CTCAGGTATT CCAGGTCACT GACATGAATT TGAAGATATA TCTATCTGTA 120  
TGGATATATA TCTATATGTA TATAGATATA TAANTACAGA GAGATATCTG GCTTGGTTT 180  
AATTATGTNC TTAAATTGTT GTCCAATAA TTGCAATAG ATTTNTTNC TTAAATATTT 240  
GACTGTGGAA CATGCCATT TAAATATGTN GTAAGGCCTG TNNTAATAAA ACGTTAGTA 300  
TGAAA 305

SEQ ID NO:2881

LENGTH:305

**01010**

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TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03422

SEQUENCE DESCRIPTION:

GATCCACTGA TGGCTCCAGA CCCCAACTTT AGCCATTGCA CGTGTGAAAC TCCAGGTTGA 60  
GCCTTTGCTG GAGCCGCCTG CAAGGGNCAT GTTGACCAA TCCCCAGTGG AGGGGAGGGT 120  
GGTGTTCCT TTCTGGGACT TCCACAAGTT GAGAACAGAC CATGCTGCC C TGGCAGTTC 180  
TTGAAGGCTG TGAGAGTGGG CCTGACAAAG TTATTCTT TTTTTTTTC CATTNCNTT 240  
TATNATNATA ATTGTTGAA ATNGNCAANT AAAAATNATG TATATTATG ANGTCANCA 300  
NGAAA 305

SEQ ID NO:2882

LENGTH:303

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03423

SEQUENCE DESCRIPTION:

GATCAGGAAA GTCATACTGT TCACCTTCAA GNTGGCTGTC CCCCCCGCCG AGCCCCCCC 60  
CCCCCATATG TACAGATGAT ANTAGGGTGT GGAATGTCGT CAGTGGCAAA CATTACAG 120  
ATTTTATTT TGTTCTGTC TNNANCNTT TTGNCACTGT GCTAATAGTT ATATTCACTA 180  
CATGAAAAGN TACTACTGTG TTGAAAGCTT TTAGGAAAT TTGNCAGTA TTTTTGTACA 240  
AAACATTTT TTGAAAAAAT ACTGGTTANT TTATNCATT TTAATTNGCC AATGTCAATA 300  
AAN 303

SEQ ID NO:2883

LENGTH:375

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03424

SEQUENCE DESCRIPTION:

GATCACCGGA CACAATCCTG CAGAAGGACA CACGACTCTA TTTCCCTACAG TGCAGAACTT 60  
GTCATTCTAG ATGTNCTGTT GCCAGTATCA AAACCGGCTT CCAGGCTGTC ACAGGCAAGC 120  
GAGCACAGCT CCGTGCCTAA GCTAACTAAT TTGCTAATCA CTGATTTNC AAAGCTTGT 180  
GTGGAGATGT GGCTGGACAG GTTGCCATC AGAGTGGATA TACCGTTGTA TTAAAAACAA 240  
GATAAAAAG CTGCCAAGAT TTTGGCGNG TGGTTGGTCT GAAGTCCTTG CAAGACGCTG 300  
NTGCTCAAGC TGTTGACATA CTCATTGGCC TACTTTAAC ACCTGTCCAG AGGAAACGTG 360  
NTATGGGGGT AAGTN 375

SEQ ID NO:2884

LENGTH:301

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03426

SEQUENCE DESCRIPTION:

GATCAGATAG GAGCACAAGC AGGGGACGGA AAGAGAGAGN CACTCANGCG GCAGCATTCC 60

01011

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CTNCCAGCCA CTGAGCTGNC GTGCCAGCAC CATTCCCTGGT CACGCAAAAC AGAACCCATT 120  
TAGCAGCAGG GAGACGAGAA CACCACACAA GACATTTTC TACAGTATT CAGGTGCCTA 180  
CCACACAGGA AACCTGAAG AAAATCAGTT NCTAGGNNNN GCTGTTACCT CTTGTTACA 240  
GTTTATATAT ATATGATAGA TATGNGNTAT ATATATAAAA GGTACTGTTA ACTACTGTAA 300  
A 301

SEQ ID NO:2885

LENGTH:297

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03427

SEQUENCE DESCRIPTION:

GATCGGGGGA GGGTAAATAA TGCAAAATT GCACAGTGGA AGAAGGGTC TCACAAAAAG 60  
CAATCCATCC TGTAGTATAG GTANNNGNGT TGGGGGAAGC AGCTTCATT CTGGATGTTT 120  
GGAACCCCTT AGCTTGTTT TGAATGGCC CACCATTCTC ACTGGAAAAC AGTGGTCTGC 180  
TGTGAAAGGC CAGCTCTCGG CAGCCCCGT GGTTTCAGCG CTGCCGCTCT GTGTCATTCA 240  
GGTTGTGCAC ATTGTTTTTC TTCTGACTTC CAGAAATAAA AGTGTTCGA TGGGAAA 297

SEQ ID NO:2886

LENGTH:296

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03428

SEQUENCE DESCRIPTION:

GATCTGGGTG CCTTGGGAGA NCCAGTCCTT CCTTTTNACC CACCCAGGA AGATGGAGTN 60  
CTCTTNTCA GGCCCATGTC CTGCCAGCAA CGGGGATGCG TGGGCAACTG GACTCTGCAC 120  
GGGGGTCTAC AGGTTGAGGG AGGTTGGTCA CAATNAGAAC CTCGGGTTT GAGGTGGCCA 180  
TGGGCAGACA GCCNNAAGGG AGGGAGGGTG TGGGTGTNCG TGTGTGCATG TCCTGGTNTG 240  
TAAGGGGAA AGGGTCTTC CTGGTTTAT TTAAATAAG TAGTTATGT AACAAA 296

SEQ ID NO:2887

LENGTH:296

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03429

SEQUENCE DESCRIPTION:

GATCTGTGCN GTGGTCTNA GGCAAGTGTN TCCACACAAG TACTACTTCC TCGTGGGCTA 60  
CAGTNAACT TTGCTGTCT ACTTTAACAA ATGTCCTGTG CGACTCCACC TCCAAACTGT 120  
GCCCTCAAAG GTTGTGTATA AGTACCTCTA GAACAATCCC CTTTTNCCA TCAAGCTGTA 180  
GCCTGCAGAG AATGGAAACG TGGGAAAGGA ATGGTATGT GGGGAAATGC ATCCCCCTCAG 240  
AGGNCTGAGG CATAGTCTCT CATCTGCTAT TGANTAAAGA CCTTCTATCT TGTAAA 296

SEQ ID NO:2888

LENGTH:356

TYPE:nucleic acid

01012

TOPOLOGY: linear

CLONE:HUMGS03430

SEQUENCE DESCRIPTION:

GATCTACTCT GTATGGGTAC CAAAATCACC TTCTCTCTTC AAGTCAAAGT TGAATTAGA 60  
 ACTTTGAATA CAGGTCAAAA AATGTAGAAA ATATCATTTC ATATCCCTA ATCTATATAG 120  
 CTGAAAAAAGG GTTGTATTTT CTTAGCTGAA TATGAATACC TCTTAAACAT AAATTAGTTC 180  
 CTCTCCAGTG AAGTATCTTA TTTACCAAT CCATTCAGG AAAGAGGTTC TGCTGCCGTA 240  
 AAGGCAGAAA TTTTATTTTT ATCCCTTTA TTTGAATGAG AGATTGAAA ATCGAATTAT 300  
 GTAAATATTT CAATGCATCT GCTATTATTT TGTGGAGTTT ATTAAACTAC TTTAAA 356

SEQ ID NO:2889

LENGTH:293

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03431

SEQUENCE DESCRIPTION:

GATCCCAAAAC CAAATCTTAG AACATCANTCA TTTAAAATAC TGAGCGGTAT TGANTACTTC 60  
 GAAGCAGAAC AGGCAATGTG CAGCCCTCAT TTATGAGAAA ACCCTCAGGA AACTCCCAGG 120  
 GTGATGCTTG GNGAAGCTGT GAGTTGAGCT GAAGCTGGAG AACTCCCTCC AGAGCAAAGG 180  
 GCTTAAGAAA GAAAGANGAA CTCTAAGCTG GGTCTGCTAA CATCACTCCA GTTTAGATGG 240  
 NTCTGTTTT TCCTTAACAN GTTGAGGCCTT GGGTAGAGCA GGANTTGGTT TTN 293

SEQ ID NO:2890

LENGTH:289

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03432

SEQUENCE DESCRIPTION:

GATCTGAAAT AACATTAATT TGATTGTAAC CCTATTGGGG TTAGTTCCA CCCTTGTT 60  
 CATCTTGAGC AGAGATGNCG TGCAATTCTT AACGTTTGGT CTCTATACAT TATACCACATCT 120  
 GCTGAAGTTT AGCTTTGTGT GTGTGTATAT GTACCCATGT GTGCACTTTA AATATCAGTA 180  
 CAAACTGATA AACAAATGTTT CTGGTTAATG TTGCAAAAAT GGAACACTGT ATTNACATA 240  
 ATTGATTTTC TACTCCTGCC CTGTGAATTA AGGCAGAGTT TTACTGTAN 289

SEQ ID NO:2891

LENGTH:286

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03433

SEQUENCE DESCRIPTION:

GATCTTCCA CACCAAGCCTC CCAAAATACT GGGATTACAG GCTTGAGCCT CCATGCCCTGG 60  
 CCCAGGTAAC ATGTTTATTG AGCTGTACAT GCATATGAGA AATAAGAAC TTTTTTTCC 120  
 TACTATCATC TCTTAAATNT NGTNTTCTTT TTCTTTGCT TCCTCTTCTT CTNTNCTATT 180  
 TNTNATAAAAT ATCATGCACA ACTATAACCT ATGGGAATNA TGTAGTAACA CAGATTATTC 240  
 ATCTTGTAG AGTTGTATTA AAAATAAACAA AGCATTCAA ATTAAA 286

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SEQ ID NO:2892

LENGTH:286

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03434

SEQUENCE DESCRIPTION:

GATCCAAGAC CAGGGTGGTT GGGGGCTGCC CCTGGCCGAG TCACTGAAGC GACTNATGTC 60  
CCTGTNTCCA GGACGANCTC CTCTCCTACT TTGGGACGCC CACGTGGCAG ACCGTGACCA 120  
TCTTTGTGGC GGNAGTGCTC ACCGCCTCAC TCACCATCTG GAAGAAGATG GGCTGAGGCC 180  
CCCAGCTGCC TTGGACTGTG TTTTCCTCG GGTAAANNNGN GGCATTNTTC TGGGAGGGGT 240  
GGGGATTGGG GGACATGGC ATTTTCTTA CTTTTGTAAT TATTGN 286

SEQ ID NO:2893

LENGTH:285

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03435

SEQUENCE DESCRIPTION:

GATCTGCNGG GGCNTGTNCA GCTGCAGCAT TCCTGAAAGA TTTCGTAACT CATCCTAAGT 60  
GGGCACATTT AGACATAGCA GGC GTGATGA CCAACAAAGA TGAAGTTCCC TATCTACGGA 120  
AAGGCATGAC TGGGAGGCC ACAAGGNCTC TCATTGAGTT CTTACTTCGT TTCAGTCAAG 180  
ACAATGCTTA GTTCAGATAC TCAAAAATGT CTTCACTCTG TCTTAAATTG GACAGTTGAA 240  
CTTAAAAGGT TTTGAATAA ATGGATGAAA ATCTTTAAC GGAAA 285

SEQ ID NO:2894

LENGTH:284

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03436

SEQUENCE DESCRIPTION:

GATCAGCTCT TTCTATTTT ACTCGTAAAA ATTATGGAAA TAAATAATT TGCTAACAAAC 60  
TTTGAAATTT CAAACTCTG GAAAANATGA AAATATTCTAT TGTCATTAT GAATTAAAT 120  
TGTAAGGTAT GAATGTNATT TGTCGTACA TCTTGATCT TTTCCAAAAA ATGATTCTGT 180  
ATCTTTGGA AAAAAGCCGA GAGTTGAAGA TAGTATATT CTGGTAGTAC TGAATATTAA 240  
CTTACAGTTT CTATCAAAAAA TATATATTG TTTCTAAAAT TAAA 284

SEQ ID NO:2895

LENGTH:283

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03437

SEQUENCE DESCRIPTION:

GATCTCCTTG TTACTGGTGG TAGGGAGCTA GACAAGGATG GCAACTATTT CTGTATCTTA 60  
CATACCTTN ATTNGAGGC CCTGTCAATG TTTTATATAA TANNCATTT TTGAAAAGGC 120

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AACCTTTAAA ACTAAAACAA ACTAACAGT CTGTCAAGTT GGTGATATAA CCCCACAGAA 180  
GACTTACTTC AAGTGACTTG AAAACTTAGT ATTTTGTCTG TNCTTGCTA ATGGGNATAN 240  
ATCCTACAGA CCAACANCC NCAGNTAANT CTTAANCTGC AAA 283

SEQ ID NO:2896

LENGTH:279

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03438

SEQUENCE DESCRIPTION:

GATCCCGGGA GACCTGGGGC TGCGAAGAA GCTCTGCTCC AAATGGAGAG TGTAGCCTGA 60  
GGGCTGGTGT TGCCTGCCCTC CCCTGTNCTT GTNCCTTGTC CAAAAATAAA TCCTTCAGA 120  
ATGTAGCACT CACGNCTAA TAAGGAGCGA ATCCTACATC CACCAAGGCC GGCGCTCTGG 180  
CCCTCCCTTC CTTAACCCCA GTCTGTGTC CTCTGAAAGA GGTTGCAGTC ACTCACACCN 240  
GCTTGCCTC ACCATCAATA AAAGTAATT CACCNAAA 279

SEQ ID NO:2897

LENGTH:278

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03439

SEQUENCE DESCRIPTION:

GATCCCCTCC CCCAAGATAAC TCTTGTGGG GAAGAGGGGC TGGGGCATGG CAGNCTGGGT 60  
GACCGACTAC CCCAGTCCA GGGAAAGGTGG GGCCCTNCCC CTAGGATGCT GCAGCAGAGT 120  
GAGCAAGGGGG GCCCCAATCG ACCATAAAGG GTGTAGGGGC CACNNNNCTC CCCCTGTNCT 180  
GTTGGGGAGG GGTAGCCATG ATTGTCCCA GCCTGGGGCT CCCTCTCTGG TTTCCTATTT 240  
GCAGTTACTT GAATAAAAAA AATATCCTTT TCTGGAAA 278

SEQ ID NO:2898

LENGTH:276

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03440

SEQUENCE DESCRIPTION:

GATCTGCTTA CCAAGCATAT TAGGAAATAC CTCTTAGGAA GCATTAGCGG TCTCAGGCCA 60  
ATTACTGTGG AGCAGCTTTC ATTCCTACCC ACTTGCAAC CTTGGCGCTG TTGTCTGAGA 120  
TTGGTGCAGC CATTCTGTT ACCATGGTAC TTCTCAAAC TTGTGAAAC CTGCACTTTT 180  
CCTTGCATGA CAGGTTCTG TCTTGCTGT CATGGGAGCC ATTCTGCCAA TTTAAATGCG 240  
ACTGTGGTAT AACAGTAAA ATGATTTAAA AGTAAA 276

SEQ ID NO:2899

LENGTH:274

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03441

01015

## SEQUENCE DESCRIPTION:

GATCAGTGT ATATTTACT GGAGAAGCTA TTGAAGATGA TGATGATGAT TATAATGAAG 60  
 AAGGTGAAGA AGCGGATGAG GTAATGTTA CCAAATAAGC AAATAATTCT NTGTGGTTAA 120  
 CACATTGAGA AGCAAATTGA ATNACTTATG TATTCCCTTG CTATAATCAT TCTGTGATT 180  
 GGGATAAAAA CATTTGGAA AACATGATT TAGAATTCTA CAGCCAAACA ATGTATGTAT 240  
 AAGGTTCAA TAAATAANTT GCAAAACCTCA GAAA 274

SEQ ID NO:2900

LENGTH:273

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03442

## SEQUENCE DESCRIPTION:

GATCCCCACC TGCCATCCTA TAGTGTGTC TTCCGTGTG TTCCGGGGCT TCTGGGCAGC 60  
 TGGGCCTGCC CGGGGAAGTC CTTGCAGGTG GGAGGCCATA CAGAGACCCA CTGTGTGCCA 120  
 CTGAGCGTCC CACTGCTGCT GGGCAACTGG AGGACTGCAG GGGGCGCCAG GTGACTCTCT 180  
 CCTTTTATAT CACAGCAGCT CCTGTGCTGA CCTTCAAGTT ACGTTTGGA ACTGTAATAC 240  
 TAAAGGAAGA AATAAACTAC TAATTTGTAT AAA 273

SEQ ID NO:2901

LENGTH:359

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03443

## SEQUENCE DESCRIPTION:

GATCTGGTTA AGTTGTGAG TAAAGCATTAA GGAGGGTCAT TCTTGTACA AAAGTGCCAC 60  
 TAAAACAGCC TNCGGAGAAAT NNNTGACTTG CTTTCTAAA TCTNAGGTTT ATCTGGGCTC 120  
 TATCATATAG ACAGGGTTCT NATAGTTGC AACTGTAAGC AGAAACCTAC ATATAGTTAA 180  
 AATCCTGGTC TTTCTGGTA AACAGNTTT AAATGTCTGA TATAAAACAT GCCACAGGCG 240  
 AATTCCGGGA TTNNAGTTTC TCTGAATAGC ATATATNTGA TGCACTGGAT AGGTCAATTAT 300  
 GATTTNNNC CATTTCGGCT TCATAATGNA AACCAGTTCA TTTTACCTAT CAGGTTATN 359

SEQ ID NO:2902

LENGTH:268

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03444

## SEQUENCE DESCRIPTION:

GATCAGAGCA CAGTTGAAAT TCATGGAACCT GGCATTATTT AAGCAACCAAG AATTCCACAC 60  
 TGAGGAAGG TTTTGAAT TGTTCGTTA TAGATTTAT CTTATCTTT GGTGTTGTCT 120  
 TGGTTTTCT CATAGACTTT ATAAGTTGA ACTGGACTTA TTTGATTATA ACCACAAATT 180  
 GTGTGTGTGT GTGTGTGTGT ATATATAGAA GTCATTATGG CAGATGCACA AATTGTGCAG 240  
 TGATGTAAT ATACATACTT CACAGAAA 268

SEQ ID NO:2903

LENGTH:264

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03445

## SEQUENCE DESCRIPTION:

GATCGGTAGT GTTGTGTGA GGCCATTCTT CTGGAGAGCC ACAAGCAGGA AGAGCAGCGC 60  
 TGTGTTGCAG AATGGAGTTC CATGGATTTC TACCAAGACCA CTGAAGGAGT TCCTNGAAC 120  
 CCTGCGGTAG CTAGCACTGA AGACTATTTT NCTATTGGTA TAACCNGCCC ACCTGAAGGG 180  
 GAAAGGGGAA ATCAANTAA TTTCTCGTT AGACATANGG AAATTTAAGG AAAAACAGNT 240  
 TAGGANCAAG TTACTCAGCG TAGN 264

SEQ ID NO:2904

LENGTH:258

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03446

## SEQUENCE DESCRIPTION:

GATCCATAGT GAAATTGCCA GAGTTTGCC TGCTGCTTC CTCGTGGCCT CTTCTGGGT 60  
 AGTGAATNA AGTGACATTT GGATTTAAT TTGGGTGGGA GGGCTGGGAC AGTTTTNTT 120  
 CTAGAAATGT CTGTTGAGAT TTCCCCCTT AGTTTCAAC CTTCTCCCCA ACCCTGGAG 180  
 CTAAATGCGT TGAAAATAT TGCCAAAATG AAAAGTGTGTT TGTAATACTG CAATAAAGGC 240  
 TGCTTGTGTT TGTTGAAA 258

SEQ ID NO:2905

LENGTH:264

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03447

## SEQUENCE DESCRIPTION:

GATCGGACAT GAAAGNACCC TGNGAGTCGA TTGTCTANC TCCAGCGGCC CTGTCATCCA 60  
 GCTCACTCAT CAATGGGGCC AGTCAGGCC AGGCACGGG CTCCGGAGGA CTCACCACTG 120  
 CCCCCCTGCTG CCATGTGGAC TGGTGCAAGT TGAGGACTTC TTGCTGGTCT AGTCACGCAT 180  
 GCAGTGTGTTGG GGGATGCCCTT GGTTTTACT GCTCTGAGAA TTGGTTGAGA TACTTTACT 240  
 AATNAAACTG TGTAGGTTGG GAAA 264

SEQ ID NO:2906

LENGTH:257

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03448

## SEQUENCE DESCRIPTION:

GATCTGCTT CAACACTTT AGCTCTCTA GAATTCAGA AAAATGGAT CGGATGTACA 60  
 GCATGGACCC TTCTNTGGTG GGCTCTTTA CTGTAATGCT TTTAANATTC ATCTGTGCTG 120  
 TTNAGTGTCT CTGCAGTCCA TTCCCTCTGT TGAGTGTATC AGTAGTCCAT TCCTTTCAT 180  
 GGCTGAGTAG TATTCATTG TATAATTATA CCACTATTTG TNCATTACT AGATAATANN 240

CAGTTGGCTT GTTTAAA

257

SEQ ID NO:2907

LENGTH:256

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03449

## SEQUENCE DESCRIPTION:

GATCCATCCG CCTTGGCTC CCAAAGTGCT GAGATGACAG GCATGAGCCA CTGCACCCGG 60  
 CCATATAATC AAATTTTAT TGATTTAGA GCAAAGGACT TTTCAATGT AACTGCTTAG 120  
 AAATCGAGCA ATTTCTATT GTATAGAGTG AAAGTCAAAC TTGTTTATTG TACAAGTCCT 180  
 TAAAGGGATA GTTAGGAGTA AGTTGTATTT GCTGAATATA TAGACCTCAT TTGTAGCCAT 240  
 TAGTGATTCT GTATTN 256

SEQ ID NO:2908

LENGTH:256

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03450

## SEQUENCE DESCRIPTION:

GATCTAATTAA AAAAAGGC AATATTTTA TATTAAGTA CTATACTAGG AGAGAAATGTT 60  
 TCANAACCTCC CTGATGAATT TCTAAGTGAG CAACTTGATA TAAAATTGTA ATCTTCATTT 120  
 TTGTCAGTGT ATCCAGTTAC AGAATGCTAC ACACCTTACCT TTTTATTGGC TGAGAAATCT 180  
 GGTTATTTCATCTAATCTC AAGATTGTTT TCAAGTGT TATAATTAAA TCATAATAGC 240  
 ATATTTAAA ATCAA 256

SEQ ID NO:2909

LENGTH:255

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03451

## SEQUENCE DESCRIPTION:

GATCAAACCA GCTCTNTNA CCCAACCAN TGCCGCTGCA TTAAAGGGAG GCCCAGCTAC 60  
 TCCTTCCCAG CTGAGATGTG GGTACAGGTC AGATTTNTCA GGGAGATGGC ACTAACACGA 120  
 CACAAGCTCA CTCCCAGAAC CGCAGCTGAT GTTTATAATA ATCGTATGTA CTGTGCAATT 180  
 TAGGAGGGGA AAAAAGGCT GTACAAGCTT TAACTCTAAA NNAAATNTCT ATTTTNCC 240  
 TCTTGCAAAN TAAA 255

SEQ ID NO:2910

LENGTH:254

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03452

## SEQUENCE DESCRIPTION:

GATCTGCCCT GTACAGCCAT GTAGGCTGTG CGCTGCATAA CTCCAGGGAC ATGAGTCACA 60

CAGACACAAT GTGAGTGTGC TCCCCGTCA TGCAACATCT GGACACAACT AACAGAGCAT 120  
 GGTGAATACA TGCTGAATTG CATTCACTAT GGCTGTGAAC TAGGCCTGGG GACAAGANTG 180  
 ANTTTACAT GGAAAGAATT TCCTGTAGCA GGAACAGAGG GGATAACAAAC AGCAGTAAAT 240  
 AATAATAAGN CAAA 254

SEQ ID NO:2911

LENGTH:253

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03453

SEQUENCE DESCRIPTION:

GATCCCCCAC TAGTNCCCTC CCTCTNCCCC TGTAATCCTG GTCTAATAAC CCCCCACACA 60  
 TACACCTCTG GTGACCTATT TGCAACAGACC GTNGTCTTCC CTCCAGNTT CTNAGGGATA 120  
 GGGGACATTC CATCCCAAGC TTCTNCCTTA CCCACACCTA CCCTTTNAG GGGCTTGGG 180  
 GTGGGGCTGG GGCAAGCAGA GGGACTGGGT CTTCACTTCT NGGGCTAATA AAATTGTTTC 240  
 TTTGTGGACT AAA 253

SEQ ID NO:2912

LENGTH:253

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03454

SEQUENCE DESCRIPTION:

GATCAAACCG GTTCTNTCCT TTCTTGTTT GCCATGTTAC TATGCCTCAA GCCCAGTTN 60  
 CTTTNCCGC AGCGATGGGG CCAGTCTCAT TCCTCCCCAG GAGTGAAACT NGCTTCANCT 120  
 GAAAAGGTTG GGTGCATTGT CAGTAAAAG GGCTTATTG TTTCAATTNA CTTTCTGCA 180  
 AAATTTCTT CAAAGCAACA AGTCTTAGGN GCACACAAAG CAACCCAAAG GCTTTCCCT 240  
 GGAAAAGCTC TTN 253

SEQ ID NO:2913

LENGTH:254

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03455

SEQUENCE DESCRIPTION:

GATCCGGGGC ATGCAGAACG TGAGCACACC CCAGAAGAAG TNAGGGTCCC CGACCCAGGA 60  
 GAACGGTGGC TCCCACAGGA CAATCGCTGC CCCCCAACCT CGTAGCAACA GCAATACCGG 120  
 GGGACCTGG CGGCCAGGCC TGGTGCATG AGCAGGGCTC CTCGTGCCC TGGCCAGGG 180  
 GTCTCTTCCC CTGCCCNTC AGTTTNCAC TTTTGGGTT TTTTATTGNT ATTAAACTGA 240  
 TGGGNCTTN TAAA 254

SEQ ID NO:2914

LENGTH:249

TYPE:nucleic acid

TOPOLOGY:linear

2153480

CLONE:HUMGS03456

SEQUENCE DESCRIPTION:

GATCCTTGTGTT TTGTTGTCAT GGAAACTTCG GGGCTGGTGG GACTTAGGCC AAAAGCTAG 60  
AGGCACAGCC AAAATTAGA AGCTTGCTAC TCCTACGACT CGGCCTATAA GGAAGAGAGA 120  
AGCTGTCTGT ACTTGGGGGA CTACATTGCT GAAGGAAAAA AATCACTCCC TGGCTAATTA 180  
AGATTGCTTC CAAATTGGGG GAATGTGTGT CATTCCCTT ACCAAGGCCA GTCATCCCTG 240  
CTTCCACCN 249

SEQ ID NO:2915

LENGTH:249

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03457

SEQUENCE DESCRIPTION:

GATCCAGGCC GGGCCTATAAC AGAGGTGCTG GCTGCTTGTGTT TACATTCTCC TCTGGGCTC 60  
TACCTCTCCA CACTTCCCCA GAAGGGAAAA GGGCACCCCTG GATTACTNNN TTGGAAATNA 120  
CTCCTTGGTG GGCAGCATCC TGAGGGTTC CCAGAACCAG GCCTCTGCTC TGGCCCTCTT 180  
GCATCTGGAA CGCCAGGTGG GTTTNTGG CATAGGAGCC CACTTGCATT TTCATAGTTT 240  
TATTGATN 249

SEQ ID NO:2916

LENGTH:249

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03458

SEQUENCE DESCRIPTION:

GATCACAGCC TCCAGGGCCC CCCAAATCCC AGGGAGGAC TTGGAGAGAA TCATGCTGTT 60  
GCATTTAGAA CTTNCTNCTT TGACAGGAA AGAGTCACAC AATTAATCAA CATGTATATN 120  
TCCNCTATAAC ATAGAGCTCT ATTNCNCTNC GGTTTATAA AAGCCTTGGG TTCCAACCAG 180  
GCAGTAGATG TNCTCTGAN CCGCAAGGNG CAAACACTGA AATAAAATAG TTTATTTNC 240  
ACAATCAAA 249

SEQ ID NO:2917

LENGTH:249

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03459

SEQUENCE DESCRIPTION:

GATCTCCTTT TGTGAAAACC AGTTTGATGT GCTAAAAGTA AAAAGTCTAN TTTCCAGTGT 60  
GGTCTTGTTC AGAAGCAGCC AGATTTCCAA TGTTGTTTT CCCCTCCACT CAGAAACCCC 120  
TGCCCTTCC CTTCAGAAAA CGATGGCAGG CATTCCCTG AGTTTACAAG CAGAGACTCA 180  
CTCCAACCCA AACTAGCTGG GAGTCAGAA CCCATGGTTG GAATAAAGAA ATTGTGCGTC 240  
TTGGTCAAA 249

SEQ ID NO:2918

01020

LENGTH:245

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03460

## SEQUENCE DESCRIPTION:

GATCTATCCC TGCGGNCTCC ACACCTGAAC TTGCCTAACT AACTGGCAGG GGAGACAGGA 60  
 GCCTAGCGGA NCCAGCTGG GAGCCCAGAG GGTGGCAAGA ACAGTGGCG TTGGGAGCCT 120  
 AGCTCCTGCC ACATGGAGNC CCCTCTGCCG GTGGGCAGC CAGCAGAGGG GGAGTAGCCA 180  
 AGCTNCTAA TCCTNAGCCT NCCCCGTGT ATTCAACC ACCATGAAAA 240  
 CCAAA 245

SEQ ID NO:2919

LENGTH:384

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03461

## SEQUENCE DESCRIPTION:

GATCAGGAAA CCAGAAATAC CACATTATG GACCATGAAN GGTTGGTTCT TGACTCTGAA 60  
 GGGACTTTG AGTTAACATCG CGTAAGGGGA TTTCTAAAGC AGGCAATCCC TGTAGCCGCA 120  
 GAGAATAAAC GCCTTCCCAA AATGGNAACT NCCCCACAGCC ACATTTCAGA CCTGCTGAGA 180.  
 CTGCTGAGTG AGGAATGGCA GTGAGGTTTC TTCATNAGT CTCAGTTCTC TTAATTTCA 240  
 GGAAGAAAGG GTAATTGCAG CCCCTCAGCC CCCAGGATTG ACCTCTNGGG AGNCATGGTA 300  
 GCGTTGTGTG CCAGGCCGTN GGTCAGGTG TTNGCAGAAG CTTTCAGATT CGTCCGAAGG 360  
 GAAATAAAAGT GTGTTGGCGT TAAA 384

SEQ ID NO:2920

LENGTH:240

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03462

## SEQUENCE DESCRIPTION:

GATCCCAGCA GCCCTCCCTT CACCGTGACC CCTGACCTTT GTTAGGAAGG TGCAGTTTT 60  
 NTTCTCAATC TAAATNCCTT TNAGGTGGGC CGCTTCCTTG GCTACCTGGT TCCAGGGGGC 120  
 TGTTTGTAATNAGATGCTG CTGGCAGGCC ACTCAGAGGC TCCCAGCTGG GTTGGTGGGA 180  
 CAGCCAGGCC AGATGACCTG ATTCCAGCAA AAATAAAACT CAGATTGGG CAAAATGAAA 240

SEQ ID NO:2921

LENGTH:238

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03463

## SEQUENCE DESCRIPTION:

GATCCCTAGC AGCTCATCCT GCCCTTGAA TACCTCACT TTCCAGGCCT GGCTCAGAAT 60  
 CTAACCTATT TATTGACTGT CCTGAGGGCC TTGAAAACAG GCCGAACCTG GAGGGCCTGG 120  
 ATTTNTTTT GGGCTGGAAT GCTGCCCTGA GGGTGGGGCT GGCTCTACT CAGGAAACTG 180

CTGTGCCCAA CCCATGGACA GGCCCAGCTG GGGCCCACAT GCTGACACAG ACTCACTN 238

SEQ ID NO:2922

LENGTH:238

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03464

SEQUENCE DESCRIPTION:

GATCACCGGT TTCCGACTGA GTCTGGGAT TTTGGCCTTG TTGACCCCTCC TAGGTGCCCT 60  
 GGGAAATTGCA AACAGCTTC TGGATGAATA TCTGGACCTC AATATTGCCA AGAAACTGAG 120  
 GCGGCAATTC TAACTTTTC TCTTCCCTT AATGCTTGCA GAAGCTGTC CCACCATGAA 180  
 GGTAATATGG TATCATTGT TAAATAAAA TAAAGTCTTT ATTCTGTTT TCTTGAAA 238

SEQ ID NO:2923

LENGTH:238

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03465

SEQUENCE DESCRIPTION:

GATCTACTGT GTGGGTCTG GGCAGATGAA AGTACACTGC TTAGNGTAT GCTTAGCATG 60  
 GGGCAGATGC TTGGTAAATT GTAATCACTT TTGTTGTCAG TTAAATGGAT ATTTCACTGT 120  
 TGCCCTCTNAA ACGCTTACGG TAATATATAC TAATTATACA TGTTATTATC AGTTTATATT 180  
 TATTGAACAT TTCGGGAAAG TAATTATAAA ATAATCTTGT CTACTGTCTT ACCCCAAA 238

SEQ ID NO:2924

LENGTH:347

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03466

SEQUENCE DESCRIPTION:

GATCTATGGT GCAGACTGCC TTCGTCGGGT GCAGACTGAG CGACCGNAGC CCCAGACACT 60  
 ACAGCTGGAT TNCTTGATGA AAATCTTGCC AAATTACCAAC CACCTAAAGA AGACTATGNA 120  
 AGGAAGCTCA ACTCCAGTAA AGAACTAAGA ACAGTGTATA ACATGAAGAT AACATTTGT 180  
 CTTTGACCAC TGTCTTTGA ATGGGCCAC AGTGTATG TACTCTAAC AACTCACAGA 240  
 ATAATACATG TTCACTTTAT TTTGTAAAAT TGGGTTGAGA GGAAACTAAT GGAGTTCAT 300  
 TGTAACTGTC CTTNTAATT TATATAATG TATTATTNTC CTATAAA 347

SEQ ID NO:2925

LENGTH:236

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03467

SEQUENCE DESCRIPTION:

GATCCTGTGA TATGGTTTN GGCCCAGCAA ATCTAGGAGA AGATGCAATT AAAAACTTCA 60  
 GAGCAAAACA TCACTGTAAT TNNTGCTGTA GAAAGCTTAA ACTTCCAGGT AAAAATTTT 120

TTAATCAGTA TAGTATATAA TTNGTTACGA AACTNGGTTA CTACAATACC TCATAAGGCC 180  
 AGAGGTACAA NTGTTAACATG TAATGGTCTC TAATTGTGCC AGCTTCAGCA GCTCTN 236

SEQ ID NO:2926

LENGTH:271

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03468

SEQUENCE DESCRIPTION:

GATCCCGCAT GCCTGAATT ACTAAAGCCA AGGGTCTNTA AGCCACGCTN NNTCTTCTGA 60  
 GACTTCCATT CCTTTCTGAT TGGCACACGT GCAGCTCATG ACAATCTGTA GGATAACAAT 120  
 CAGTGTGGAT TTCCACTCTT TTCAGTCCTT CATGTTAAAG ATTAGACAC CACATACAAC 180  
 TGGTAAAGGA CGTTTCTTG AGAGTTTAA CTATATGTA ACATTGTATA ATGATATGGA 240  
 ATAAAATGCA CATTGTAGGA CATTTCCTAA A 271

SEQ ID NO:2927

LENGTH:235

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03469

SEQUENCE DESCRIPTION:

GATCTAAAAT GTTTATTCCCT TCTGTAGTGT ATTAATCTCT GTGTGTTTC TTTGGTTTG 60  
 GAGGAGGGGT ATGAAGTATC TTTGACATGG TGCCTTAGGA ATGACTGGG TTTAACAAAGC 120  
 TGTCTACTGG ACAATCTTAT GTTCCAAGA GAACTAAAGC TGGAGAGACC TGACCCCTCT 180  
 CTCACTTCTA AATTAATGGT AAAATAAAAT GCCTCAGCTA TGTAGCAAAG GGAAA 235

SEQ ID NO:2928

LENGTH:234

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03470

SEQUENCE DESCRIPTION:

GATCCATCTN CCCTCATAAA AGTGTTCAGG TACAGCAGCT GAGGCTGCC TGAGGAATCA 60  
 NGGGGCCATT ACCAAGGGGC AGGTAAAGGG TATNTAAGAG GTGGCCTCA TGGTAGAGCT 120  
 TGACCCAAGA NCTACTCCAC ATTGGNTNG CCCAGACTGA CTCCATCCCC TGANTTTCCC 180  
 TTNGACTTCA CCCTGTTGT AAATAAAACA NTAAAATGGA AGGTGCTNTG GAAA 234

SEQ ID NO:2929

LENGTH:233

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03471

SEQUENCE DESCRIPTION:

GATCTCAAAT CCTGGAACCC CGATTCAAT CTACGTTCTA GTCACTGCC TCAAAGGACC 60  
 CCACAGCACC TGGGCCAGAC CAACAGCTCG AGGGAGAACC TGAAGGCCA GGGGGTCCAG 120

GGCGGACCTG GGGCCCCGAC CACCAAGGAC AGTCACGAC TGCCCCTTNA CTGCATGTCC 180  
 CCAAACTNAG CATGACTCCT GTCCCTTTCA ATAAAGACGT TTCTATGCC AAA 233

SEQ ID NO:2930

LENGTH:231

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03472

SEQUENCE DESCRIPTION:

GATCAGCAGA AAGCACAAAC ACAACTGCTT CTGTATTAG GAGGTTGTGA GTGGGCTGCG 60  
 GCANCCGTG GTGCCCTGCA TAGTGGGGAT GGCTCGCAAC GTCTCTTCAT TCTGGAAAAAA 120  
 GAAGGTTATG TGAAGATACT TACCCCTGAA GGAGAAATTT TCAAGGAGCC TTATTGGAC 180  
 ATTACACAAAC TTGTTCAAAG TGGAATAAAG GTTGGCTTT TAAATTTAA A 231

SEQ ID NO:2931

LENGTH:231

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03473

SEQUENCE DESCRIPTION:

GATCAGCAAA AATAAAGGGG CTACAGAAAC ACTCATTTT ATGCTGTCC CTCTGGGCT 60  
 TCATGCAAAG ACAATTCTNT GTAAATNTAC AGTTGACTCT GATTTGGAAA TATGAAAATC 120  
 AGTCATCCT TGTTATAAAA AATTTTTTA CAATTGTAAT TATATTGATG TTCATATTGT 180  
 GTAAAATAAC TCATTTAATA AAATAGTACT TTGATTTACG ACATCAATAA A 231

SEQ ID NO:2932

LENGTH:230

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03474

SEQUENCE DESCRIPTION:

GATCCCACCC CCAGCCATT GCATTGCTGG CCCAGCGCCT GGCCTGGGG GCGGGGAGAG 60  
 GCAGCAGAAG GGGCTGGGCA GGGCGGTGG AGGACTCAGG AACTNCCCG GGAGAGTGGG 120  
 TATGGCGGCT GAGCCAGGGN CCCTCTGTN TTTNACTTCC CGGGATGGGT CCTTGCTNN 180  
 AAGCTGTNTC CGACCCACC ATNTAATAAA ACCCAAAGGA ACAGCCCAA 230

SEQ ID NO:2933

LENGTH:328

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03476

SEQUENCE DESCRIPTION:

GATCAGCCGG AAACCCCTGG CAGCCAAGAA CAGATAAGGA AGGGATTGGC ATCGGCTGGC 60  
 CTTCCAGCAC CTTCCTCTC CAACACTTCA TTCTCTCTTG CCCTGTNTCT CAAATAAAC 120  
 CAATGCTGCG TGTGAGGCCT TTTTATTTT TCTTTCACT CTCTTCTAA TGCTTCCCAC 180

CTTACCTTT AGATTCTTT GCTAGGTGGG AGATTGTTAT AAGGTCTTA ACCCATTCC 240  
 ATTTGTTCT TTAACATTAC CAAAAGCAGG GNACAAAGCT CTTATTCAAC TGCGNATTCC 300  
 ATAGNGGGCT CTGGNTNTT CTTGAATN 328

SEQ ID NO:2934

LENGTH:220

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03477

SEQUENCE DESCRIPTION:

GATCTTGCCC GGTGTCCTGG TCCTCTTGCT TCCGTCGCCG CCGCATGTGC GTGTGTCCAA 60  
 GCAGGGTCTG GGCGCCTCAA CTGCTGCCCG TGGTTGAATG TTCTCTTGAT AGTGTGGAC 120  
 CCTTTGTCTA TTTNAAAAGCG AATTTGTGT GATTTCTGC CCTTTGCCTT ATATTGTATA 180  
 ATACCAACGT AAGGAAATAA ACCTTTGGAA TTGTTGGAAA 220

SEQ ID NO:2935

LENGTH:219

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03478

SEQUENCE DESCRIPTION:

GATCCGAGGG CGATGGGACA GTGCACCGCA GATAGAAGAG GAGGACGTGC AGCATGGTGG 60  
 GAAACGGGGA CACCACCTCC CAGGACGACT GTTTCAGCAA AGAGCGCANT GCTCCAGGTG 120  
 ACCCAGCAAG GCTGTGTNT GTATGGAAGG ACACGCTCGC GGCAAGGGCA GGGCTGGGN 180  
 AGGGTGGCCT GTCCAGTCCT NNAGACAAGG GGAGGCCTN 219

SEQ ID NO:2936

LENGTH:218

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03479

SEQUENCE DESCRIPTION:

GATCACCTGA GGTCAGGAGT TCGAGACCAG TCTGGCCAAC ATGGTGAGAC CCCATCTCTA 60  
 CTAAAATAC AAAATAACC AGGTGTGGTG ATGCATGCCCT TTNACTCGGG AGGCTGAAGC 120  
 AGAAGAACG CTTAAACTCG GGAGGGCGGAG GTTGCAGTGA GTCCAGATTG TGCCATTGCA 180  
 TTCCAGCCTG GACAAGAGGA GCAACACTCT GTCTCAAA 218

SEQ ID NO:2937

LENGTH:218

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03480

SEQUENCE DESCRIPTION:

GATCATGCCT GCGTGACAAA GCCTCCAGAA AAATCCTGA AAGACAGGAC ATGGAGAGCT 60  
 GCTGGGTTGG CGAACACATC CATGTGCCGG GAGGATGGTG CACCCCACT CCACAAGGAC 120

2153480

CCTTCCAGAC CTCACCCTGT GTATNTCTTC ATCBBBBBGT TCATTTGTAT CCTTTAAAT 180  
ATCCCCGTGA ATAATCAGC AATAGTAAGT AACTAAA 218

SEQ ID NO:2938

LENGTH:218

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03481

SEQUENCE DESCRIPTION:

GATCTAAACA GTGAATAGTA CATGCAAAGG CATAAGTCTAG AGGATAAAAG TGAAAATAAT 60  
TAGTAGCAAA ATNAATGCCT TGTGGATGAG GTTAAAGGGC CAATAACTAT CTTGAGGTAA 120  
GGCCAGGTG TGGCTGCCTT TGTGTTGTAC TAAGGGTTT GGACCTTCCT AGGAGATTAG 180  
AGCTTNATTA AAGTCACAAC ATCCATAAGN GAAATAAA 218

SEQ ID NO:2939

LENGTH:218

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03482

SEQUENCE DESCRIPTION:

GATCCCTTG CTGTGAGGGT AGAAAAACCTC ACCAACTGCA CCAGTGAGGA AGAAGACTGC 60  
GTGGATTCAT GGGGAGCCTC ACAGCAGCCA CGCAGCAGGC TCTGGGTGGG GCTGCCGTTA 120  
AGGACGTTCT TTCCCTACTG GTGCTGATAA CAACAGGGAA CCGTGCAGTG TGCATTTAA 180  
GACCTGGCCT GGAATAAAATA CGTTTGCT TTCCCAA 218

SEQ ID NO:2940

LENGTH:216

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03483

SEQUENCE DESCRIPTION:

GATCTTAGAT TTGATGAAGC ACAGTATGCA GGTAGGCCTA ATGGGGGAAG ATGGTAATAT 60  
AAAAGCAAGA AGTATTTTT TTTGNAATG NCTGAAAGCT GTTCTGTGGA TGACCTACCG 120  
NTTCCTTAA ACACGATTCT CTCACCTCCA ACTCCAAACT TGCTCAACTA ATCCTAAAAA 180  
ATAAAACTTGA GCTGGAATTG GAGGCTTGCC TGGAAA 216

SEQ ID NO:2941

LENGTH:213

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03484

SEQUENCE DESCRIPTION:

GATCTCGGGG GTGTGGGGCC CTGTGCCTTC CTGAAGTGCT GGCAGCCAG TGGCACCTCC 60  
TTCAGGCCCTT TGGGGTATTC CCCTAGTGTG CCCAAGTNG CCTCATATTC TGGGCGGACA 120  
GCTTGTCTGG ACTTCGGAGT TGGGGGTGGT CAGACACCAC AGGAGCTGTC ACCTCCTGCG 180

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GATGGGCAAA TAAATTNGT GAGGACNCCG AAA

213

SEQ ID NO:2942

LENGTH:212

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03485

SEQUENCE DESCRIPTION:

GATCCTCTCC CCTAGTATNT TCAGCACATG CTCACTGTT CCCCCATCCT TGTCCCTCCC 60  
 ATGTTCATTA ATTCAATTG CCCCCGCGCT AGTCCCATTT TCACCTCCT TGACGCTCCT 120  
 AGTAGTTTG TTAAGTCTTA CCCGTAAATT TTNGCTTTA ATTTGATAAC CTCTTATGA 180  
 CTTAACATA AAAAGGATGT ATGGTTTNA AA 212

SEQ ID NO:2943

LENGTH:212

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03486

SEQUENCE DESCRIPTION:

GATCTTTCA GAGTGGTGT TCTAAAAGAG CATGTACAAA AGTGGCCTGT GGACATTTAG 60  
 GCCTAAAGTG ATGCATTNC TCTTCTNTT TGTGCCATG TATCAATGTA GAGTTGCTCT 120  
 GTTTCTNCA ACTGTATNN A TTGCTGCATT TCTCAGCATA AACTTATCCC ATTGTATTT 180  
 TNATAAATAA ATATTTTT TGAACTTTCA AA 212

SEQ ID NO:2944

LENGTH:212

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03487

SEQUENCE DESCRIPTION:

GATCAAGGAT GAGGATTAGC ATCTGCAAAT TGAACCTAT CTAATTNCA TNTTTATTC 60  
 TTAGAATTGT AATTAAATTG GTGTAAATTA TGTNTCCAT TTCATTGTA CACTAAAAC 120  
 TTGGGTGACT GAAATGCAGT TAAGTGAATT NCCTTTNTT AAAAGCAAAT GTAGATTATN 180  
 CAATAAAGCA GCAAACCAAT ATTAANCATA AA 212

SEQ ID NO:2945

LENGTH:211

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03488

SEQUENCE DESCRIPTION:

GATCTATGTA AAAGAATACA ATTCTTTTT ACATAATTAG TGAAATTAA TTTTTATTA 60  
 GGAAACACTA AATAGTGTAA TATTCTTTT GCTTTAAAA AAATTCTGG TAGCAAATCA 120  
 AGATAAATAA TTGNTTCATT TTCTTGAGCA ATACTGAAGC AGGATGAAGT AAGAGGAATG 180  
 CATTCAATTAA AACATGCTTT GCTTGNTGAA A 211

SEQ ID NO:2946

LENGTH:209

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03489

## SEQUENCE DESCRIPTION:

GATCAAAGAA CTTTCTTAT AACCTGCAAT CAGCTACTCA GCCAAAAAAC AAAACAAAAC 60  
 CTTGACTGCC TATGGAGGAA GACTGTGTTG GGGGGAGCTG GCATAGCTAG TGCAGAGTTC 120  
 AGATTTCTG CTGATAATCT TTTACACCTT GGGAAACTT TAATATCCGT ACCTGAAGGN 180  
 TGATTACACT AAAAATGTGT TAACTGAAA 209

SEQ ID NO:2947

LENGTH:208

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03490

## SEQUENCE DESCRIPTION:

GATCTTCTCT GTGAATCCAC CCCTGGCTAC CCCCCACCTG GCTACCCAA CGGCATCCCA 60  
 AGGCCAGGTG GGCCCTCAGC TGAGGGAAGG TACGAGCTCC CTGCTGGAGC CTGGGACCCA 120  
 TGGCACAGGC CAGGCAGCCC GGAGGCTGGG TGGGGCCTCA GTGGGGGCTG CTGCCGTGACC 180  
 CCCAGCACAA TAAAATGAA ACGTGAAA 208

SEQ ID NO:2948

LENGTH:207

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03491

## SEQUENCE DESCRIPTION:

GATCACACTT NGGCCTCAC TGCAGCGTGG TGTGCCACC GTCCGTTCC TCTCGGCCTT 60  
 CCTCCGAGTC CAGGTGACT CTGTGGATGT TTGGATGTGG CCCGAGCAGG CTCAGGCGGC 120  
 CCCACTNACC NACAGCATCC GCCGCCACCC CTTCGGGTGT NAGCNCTCAA TAAAACAAC 180  
 ACACTATAAA GTGTTTTAA ATCCAAA 207

SEQ ID NO:2949

LENGTH:203

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03492

## SEQUENCE DESCRIPTION:

GATCTGAAAA TTCTTGAAA TTGTTCCATG TGATTAACAT GGAAC TGCGCT CTACTTAATC 60  
 ATTCTGAATN ATTAATCGT TTCATTTCT AAATGCNTTA TAATGTGTTT AGCCCTTCT 120  
 TGTTGCTGTA TGTTTAGATG CTTTCCAATC TTTGTTACT ACTAATAATG CTATAAAATA 180  
 AATATCCTTG TACTTCTTTG AAA 203

SEQ ID NO:2950

LENGTH:201

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03493

## SEQUENCE DESCRIPTION:

GATCTNTCT GTNTGGTGG GGAGCCGGCC GGCGTGACC CAACGGCATIC CCAAGGCCAG 60  
 GTGGGCCCTC AGCTGAGGGAGGTACGAGC TCCCTGCTGG AGCCTGGGAC CCATGGCACA 120  
 GGCCAGGCAG CCCGGAGGCT GGGTGGGCC TCANTGGGG CTGCTGCCCTG ACCCCCAGCA 180  
 CAATAAAANT GAAACGTGAA A 201

SEQ ID NO:2951

LENGTH:200

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03494

## SEQUENCE DESCRIPTION:

GATCGTATAT GTGGGCCCT TCCCTAGAAG AATGGTTGCT GATATGGCTA CTGCTCTAC 60  
 ATCTNGAGTT TTTNAATTAA CTTTTTNAC ACTGTAGCAT TGAGACTGCT TGATTCAAGT 120  
 CTGGTGCCTT GCCAGATGTA TTAATTNCCA TAAATGCTTT GTGAGTTGG TTAAAATGAA 180  
 GATTCACTTG GGAAANCAAA 200

SEQ ID NO:2952

LENGTH:199

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03495

## SEQUENCE DESCRIPTION:

GATCACAGCC GGAATGCAGC TGAAAGATTC CCTGGGGCCT GGTTCCAACC GCCCACTGTG 60  
 GACTCTAAGG CCTCTGCATT TGTGGGTGGT CTGNCTGTAA TATTTGGTC ATNGGCTGGT 120  
 CTGGTCGGTT TCCCATTGT NTGCCAGTC TCTATGTGTC TTAATCCCTT GTCCTTCATT 180  
 AAAAGCAAAA CTAAAGAAA 199

SEQ ID NO:2953

LENGTH:319

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03496

## SEQUENCE DESCRIPTION:

GATCTCTAGT TTTNTGGTT TAATTTNAG TAGCAGGTCA AAAACCTGCC CTCCTGTNAC 60  
 TTATTCCCTG AGACTTTCA GGAGAGCCAG CCCACAGATG ATGAAGAAAT GATGGAAGTT 120  
 CATTGGAGA GTCAAATGGG AAAAAAACAA ACAAAAAACT GCCTTTAATA CAGGCAATT 180  
 AGTGGACTAT AATAATAGTG GAGGGTTGAG ATGTAGAGTT TTTAAAAGT GAACAGTTGC 240  
 TGTCTTACA TCTNTAANGA AAGCCATAAT GTCTTAAAT CACTCTCTG TAAATAGATG 300  
 NCCNTTTTG CAGTGTAAA 319

2153480

SEQ ID NO:2954

LENGTH:193

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03497

SEQUENCE DESCRIPTION:

GATCCTTAAT GCAGAGCTAG AGGACTTCTG GCAGGGAAAGT GGGGAAGTGT TCCAGATAGC 60  
AGGGCATGAA AACTTAGAGA GGTACAAGTG GCTGAAAATC GAGTTTTCC TCTGTCTTA 120  
AATTTTATAT GGGTTTGTT ATCTTCCACT GGAAAAGTGT AATAGCATAc ATCAATGGTG 180  
TGTAAAGCT AAA 193

SEQ ID NO:2955

LENGTH:193

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03498

SEQUENCE DESCRIPTION:

GATCTGTTTC ATTTATAAAA GGTCCAGTTT TTAGGACTAG TACATTCTG TTATTTCTG 60  
GGTTTTATCA TTTGCCTAA AATAGGATAT AAAAGGGACA AAAAATAAGT AGACTGTTT 120  
TATGTGTGAA TTATATTCT ACTAAATGTT TTTGTATGAC TGTGTATAC TTGATAATAT 180  
ATATATATAT ATN 193

SEQ ID NO:2956

LENGTH:193

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03499

SEQUENCE DESCRIPTION:

GATCCAAGAA TGTGCCAAGA GTCCCGCCAG CCTCAGCCAG GTGGGCCTGT ATATAAGGTC 60  
CATGTGCAAT AGGGAGGGAC GTCTCTATT TTTNCTGCC CCCTCCCCGC CCACTGCTG 120  
GGCAGGGGG AGAAGGTATT TTCGAGATAA AGCACAGGCA CCACAAATAA AAGTCGTGAA 180  
GTTGCCACTC AAA 193

SEQ ID NO:2957

LENGTH:192

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03500

SEQUENCE DESCRIPTION:

GATCTGGGAG CAAGCTACCA ACAGGGGAGA CTCTTCTG TATGGACAGC TGCTGTGAA 60  
ATACTGCCTG CTTCTCCCAC CTNCTCANAG CCACAGGAAA GAGGAGGTGA CAGAGAGAGA 120  
GCAAGGAAAG TAATGAGGTG GATTGATACT TTCTACTTTN CATTAAAATT ATTTCTAGC 180  
CTGCAGTCTA AA 192

01030

2153480

SEQ ID NO:2958

LENGTH:190

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03501

SEQUENCE DESCRIPTION:

GATCAGCTG GGCATCATGG TGGCCTGCAC CTGTAGTCCC AGCTACTCAG GAGGCTGAGG 60  
TGGGAGGATA GTTGACCCCC AGAAAGTTGA GGCTGCAGTG AGCCATGAAT GCACCACTAC 120  
ACGCCAGCCT GGATGACAGA GCGAAACCT GTCTCAAAGT AATTAATAAT AATTATATTA 180  
ATTCAGCAAA 190

SEQ ID NO:2959

LENGTH:190

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03502

SEQUENCE DESCRIPTION:

GATCTGCTTC CCACTGTGAC TGGGCTATGG GATTCTGACT ACCTTGCTTA CAGATTCATG 60  
GTTTGATAAA TTGTTGTAT TCAAAAACCTT GAAATGCAGG ACGCCATTAA GTGTCGTGTT 120  
ATATTTNTGG AATATTGTA TTACTTACAA TTAATTAATA AAAGTGGTT TAAAAAACCT 180  
TTCCAGGAAA 190

SEQ ID NO:2960

LENGTH:193

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03503

SEQUENCE DESCRIPTION:

GATCTTGCCC CCTTGACCT TCCCCAAAGG ATGGTCACAC ACCAGCACTT TATACACTTC 60  
TGGCTCACAG GAAAGTGTCT GCAGTAGGGN ACCCAGAGTC CCAGGCCCC GGAGTTGTTT 120  
TCGGCAGGGG CCNTNTCTCT CACTGCATTG GGTCAGGGGG GCATGAATAA AGGCTACAGG 180  
CTCCAACNTG AAA 193

SEQ ID NO:2961

LENGTH:185

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03504

SEQUENCE DESCRIPTION:

GATCAATCTG AAACTATCTT AGCCCAGTCA GGGAGCTCTG CTTCCCTAGAA AGGCATCTTT 60  
CGCCAGTCCA TTGCGCTCAA GGTTGAGGCC GCCATTGGAA GATGAAAAAT TGCACTCCCT 120  
TGGTGTAGAC AAATANNAGT TCCCATTGGT GTTGTGCT ATAATAACA CTTTTCTTT 180  
TTAAA 185

SEQ ID NO:2962

01031

LENGTH:191

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03505

## SEQUENCE DESCRIPTION:

GATCCAACGA GGAATATTTT GCCACACGGC AAATATATAAC CGTATAATTT TCTGTACCAAC 60  
 TTGATAGAAA GGTAAGAACAT GAATATTGTT TTTAAATAA CTTTTCTT ATATAAGTAA 120  
 TATGTGCTTA TCGTGTAAC ACCTAAAAAC ATTGAAAAAT AAAAGGAAAAA TAAAATTCCAT 180  
 ACATAACCAA A 191

SEQ ID NO:2963

LENGTH:177

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03506

## SEQUENCE DESCRIPTION:

GATCAGAAAT GGAGCATGGC CTTGTCCTTT AATGGGGATG CAAATAAAGT TTGTGGGTT 60  
 AAAAGTTATA AGACAGNAGT GATACCCCAC TCTCTCCATT ATTGTCCAGC GGGGTGACAT 120  
 AATGACAGGT TAAATATTG TGATTCATTG ATTAAATATT ATTTAAAGAA ATGTAAA 177

SEQ ID NO:2964

LENGTH:176

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03507

## SEQUENCE DESCRIPTION:

GATCACAGNG NTGGTGTCAA ATNCTATTNN AGGTTTGAAC TCTTGAGCTG GAACCTCAGC 60  
 AAAACTAGAGT ATATATTGTT CAGTATTCT TTGGAAACAT TTCATTAATG TACTTGTCTT 120  
 ACAGAAATTG CTGAACTTA GTAAAAAAAAA ATAAAGTTAA ACTTTAAAAA CTCAAA 176

SEQ ID NO:2965

LENGTH:172

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03508

## SEQUENCE DESCRIPTION:

GATCTGAACG ATCCCGTGTCA CAGTTTGCAGA AGTCCTATTG CCCTCCTCCT GTCTGTGCC 60  
 TTTGTTCAAGG TGGGGATGTA TTTCATGTAG AAGGTGGAAG AAGGCTGCTA TNACTCTTG 120  
 GATGGGAGTC TGGCAAGAGG AAATTGGAAG ATAAAATAAA TAATAAGTGA AA 172

SEQ ID NO:2966

LENGTH:172

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03509

## SEQUENCE DESCRIPTION:

GATCTGCTCT GCTGCCCTGA ACTCTTACGG CAATTTAGGT TTCTCATTT NNTTTCTTT 60  
 TTACATATGT ACAAAATTGTT TTAAGCTTG GCCTCTATCC AGGTTATNCT GACAATGAAG 120  
 AAATGGGAGT TGTCAAGAGCA TAAAAATGCA ATCTTCACTA AAANCAGTGA AA 172

SEQ ID NO:2967

LENGTH:170

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03510

## SEQUENCE DESCRIPTION:

GATCTCTAAT ACAGTATCTA ACACAAAAGA AGCTTTAAAA AGACAGTTTC TTTCCTTATT 60  
 TGATTAGCTA GAAGTTTATC TAGGTTAAAG CAAAAAAAANNTTNCAAN GCATANCATA 120  
 NCATTGGGGT TCTTTTATA CTCAAGATGT TTANCTGTTCA AAANTGNCAN 170

SEQ ID NO:2968

LENGTH:355

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03511

## SEQUENCE DESCRIPTION:

GATCCAGGCG GGAGCAGAAC CAAAGCCAA AGCCCAAGAG AGTGGCAGTG CCAGCACTGG 60  
 TGCCAGTACC AGTACCAATA ACAGTGCAG TGCCAGTGCC AGCACCAAGTG GTGGCTTCAG 120  
 TGCTGGTGCC AGCCTGACCC TCACNTCAC ATTGGGCTC TTCGCTGCC TTGGTGGAGC 180  
 TGGTGCCAGC ACCANTGGCA GCTCTGGTGC CTGTGGTTTC TCCTACAAGT GAGATTTAG 240  
 ATATTGTTAA TCCTGCCAGT TTTTNTTT TCAAGNCAGG GGTTGCATNC TNAGAAAACC 300  
 CTACTCNACA CAGCACTTCT TANGTAGGC CNCTTATTCA ANTCAATT NNAGN 355

SEQ ID NO:2969

LENGTH:258

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03512

## SEQUENCE DESCRIPTION:

GATCTCGGAT GCCATCCCCG AGCTGAAGGC CTCCATCAAG AAGGGGGAAG ATTCGTGAA 60  
 GACCCTGAAG TGAGCCGCTG TGACGGGTGG CCAGTTTCT TAATTTATGA AGGCATCATG 120  
 TCACTGNAAA GCCGTGCAG NTAAACTTG TATTNAATT TGCTTGCTG ATGATTACTG 180  
 TNTTGACATC NTCATGCCCT CCAAATTGTG GGTGGCTCTG TGGGCGCATN ANTNANAGCC 240  
 GTCCTTGATT TTGGGAAA 258

SEQ ID NO:2970

LENGTH:81

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03513

## SEQUENCE DESCRIPTION:

GATCACAAAGA GGCCCATTG TAGTGGCTGG TTGACAACGG CTGGNGCAAA TTAAATAAAT	60
AAAATAGCTC TNTCTTCAA A	81

SEQ ID NO:2971

LENGTH:169

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03514

## SEQUENCE DESCRIPTION:

GATCTNAGAC ATCCCCATCT TTGTAAGCAG AACAGTACGG CACTTCACCA CATCTNCTTC	60
CCACCATGCT TCTAACGCAGC TGTNTTCCCC CTGCTAATGT TACAACCAAA GCAGCCACCC	120
CACCTCCTNT NGTGTGAGC CTCACGACCT NTGACCCAGC TGGAAAGCN	169

SEQ ID NO:2972

LENGTH:168

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03515

## SEQUENCE DESCRIPTION:

GATCTCATT A CTGCTTTCT TTTATGTCCT TTTGTCTCCA TGGGAGGTTG AGCTTCTTT	60
CCTACAAGTT TACTTACTGT TTGCATTTAC TTTTCTTTG CATTGTCTGT TCCAGTCCTC	120
TGGCTATTG ACTATTGTGT AATAAAAGGA CAAAAAACAA ATGTGGTN	168

SEQ ID NO:2973

LENGTH:225

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03516

## SEQUENCE DESCRIPTION:

GATTTGCTG CAGCCACAGT GCAGNTCCAC ATTAACTCTA CAGACCAAAC CATTGTATC	60
TGGCATCACT TACTAACACA CGNCATGCGG CTTTTCTGCA TCAACTGCTA TGACGGTTAA	120
GANTGTCAGT ATACAAGNAG GGATAGAAAA CTGGTACTGT TTTAAATAAT CTGTAATNTC	180
AATGTTTTT TTTTNTTTC GGAAANNNT NGTTTGCCC GNTTN	225

SEQ ID NO:2974

LENGTH:169

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03517

## SEQUENCE DESCRIPTION:

GATTTCTGT GGTGCTTAAG GNAACTTACT AGAGCTCCAC TAACAGTCTC ATAAGGAGGC	60
AGCCATCATA ACCATTGAAT AGCATGCAAG GTAAAGAATG AGTTTTTANC TGCTTTGTAN	120
GCAAATGGNA AAGGTCAATA AAGNTATATT TCTTTAGNAA ATGGGCAAA	169

2153480

SEQ ID NO:2975

LENGTH:167

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03518

SEQUENCE DESCRIPTION:

GATCCCAACT CCCATGACCT CTGGCTTCAG TGGTGGGTGG GGCAGGGCAG ATGAAAGGC 60  
TTCAGTGGGA ACCTCTGAGA GCATTTCTT GTTCCCCCTA TCAACCGCCC CCAGTGATAA 120  
CATCTGTGAA GCCAGCCATT ACTCAATAAA CTGCAAACCTT GTCTAAA 167

SEQ ID NO:2976

LENGTH:167

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03519

SEQUENCE DESCRIPTION:

GATCAGNAGC CCACTGATAA GGGGCCCTAG GGTACAGGGT GCTGCCAGC AGGTCGCCAC 60  
CGAGTGTCTT CTCATTTAT TTCAGCTCCA TTTGCCAT AGATGGGCAG AGGGGTGAGA 120  
TTGGCTCATC CCCCTTCCAG ATTCTGCAAT AAAGCGGTGT GAGGAAA 167

SEQ ID NO:2977

LENGTH:167

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03520

SEQUENCE DESCRIPTION:

GATCATTCCC TCTTTNGGA TGTATAAGAN CCTTCCGGAC AACAGAACCT ATTTNTGGAA 60  
TTGCAGAAGA TAACATATTT CCCTTATTTN NATTTAATCA CCATAAACCA TACCTATTAA 120  
ATGAGTGTAT TCTGTGCAAT TTTTCCCTCA GATTGTNTTT AACTNNN 167

SEQ ID NO:2978

LENGTH:166

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03521

SEQUENCE DESCRIPTION:

GATCGACTGC CAAGCAGCAG CCGCTGCCGA GGGGCTGCGT CTGACATCCT GACCTCCTGG 60  
ACTGTAGGAC TATATAAGT ACTACTGTAG AACTGCAATT NCCATTCTT TAAATGGGTG 120  
AAAAATGGTA ATATAACANT ATATGATATA TAANCCTTAA ATGAAA 166

SEQ ID NO:2979

LENGTH:165

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03522

01035

## SEQUENCE DESCRIPTION:

GATCTGGCGG GGGTGGTGCCTCCAGGG CGGATGCCAC CGGGTCCCC AGGGAAATAC 60  
 ATGTCCCCAG CTCTGGGAGG GGTTGCTAC TGGCCTCTA CTTTCCTCCC TAGGTGGACA 120  
 GTGCTCTCT AGAGAGCTGC GACTTTAATT AAAACACAACA GGAAA 165

SEQ ID NO:2980

LENGTH:165

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03523

## SEQUENCE DESCRIPTION:

GATCAGTGTC AGATATTGTT GAGGGAAAGTA ATTTTATAAA GTTACACAAA GGTAGTTATA 60  
 AAAAAAGCCC AGTTTGTTC TCAGAAGGTG ACTTNATGT GCTTGAAAAG TTTAATATTT 120  
 GANTATTGTC TTAAACCACA TGGTATTAAA ATTTGCAAT ATAAA 165

SEQ ID NO:2981

LENGTH:163

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03524

## SEQUENCE DESCRIPTION:

GATCATGAAA TAATGTGCTT TGTAAGGAGA TTTCAAGTTA TTAGGAAGCA TACTCTGTTT 60  
 TTNAATCATG TATAATATTC CATGATACTT TTATAGAACCA ATTCTGGCTT CAGGAAAGTC 120  
 TAGAAGCAAT ATTCCTCAA ATAAAAGGTG TTTAAACTTT AAA 163

SEQ ID NO:2982

LENGTH:162

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03525

## SEQUENCE DESCRIPTION:

GATCCGCCTG CTTCGGCCTC CCAAAGTNCT GGGATTATAG GTGTGAGCCA CCCTGCTCAA 60  
 CCAGGTTNA TTATTTAANT TAGTTAACT TTGGATAGAT TGTATAATAT ATAGTTAAT 120  
 GTAATCATGC TCATATTTT NAAATAAATA AAACACTATA AA 162

SEQ ID NO:2983

LENGTH:161

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03526

## SEQUENCE DESCRIPTION:

GATCACTTGT TGTTTACTA AAGAAAGATT ACTTAGAGGA AATAAGAAAA ATCATGTTG 60  
 CTCTCCCGGT TCTTCCAGTG GTTTGAGACA CTGGTTTACA CTTTATGCCG GATGTGCTTT 120  
 TCTCCAATAT CAGTGCTCGA GACACAGTGAGCAAATTAA A 161

SEQ ID NO:2984

LENGTH:161

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03527

SEQUENCE DESCRIPTION:

GATCTGAGGT CTAACATTGT TATCCTATAT CATTTCATC CCAAGTAGTG ATATCTGTGA 60  
AATCACAGGT TTGATGTGTG CTAATNATGT ATTCTTCTAA TACATATTAA AAGACATAAC 120  
TATCAAACAA AAATAAATT GTCTGTTTC AACCAAAGAA A 161

SEQ ID NO:2985

LENGTH:161

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03528

SEQUENCE DESCRIPTION:

GATCTCCATT TGATATTTTC ATTTGTATAA CTCATTTGCA GTCTGAAAAT TTTTTTTAGT 60  
GCCAGTCCTT GAACATATCA TTGAAAGTTA ATTTCTTTG CATTAAAGAA TATCTGGATT 120  
ATGAAGAAAA AGTGATGAAA ATAATTAA ACTGAATTAA A 161

SEQ ID NO:2986

LENGTH:160

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03529

SEQUENCE DESCRIPTION:

GATCTGTGCT AGCTGTGAGG CAGCTCTGGA ACGTGAAGAG CTGTTGGTT TGAACCGTGA 60  
ACAAAAGTGT GTTTGAGTT TAGCTGACAT TATGGAAAAA AGTTCATCAC GTGACTGTTA 120  
ATGTAAACCT GGTTATTAAA ATAACNATGA AATTACCAAA 160

SEQ ID NO:2987

LENGTH:157

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03530

SEQUENCE DESCRIPTION:

GATCTCTCTG TNACTGACTT TGTAAGTGTGTC CTGTGGTTTC TCCTGCCATT GCTTTGTGTT 60  
TGGAAGGACA TGATGGGGGT GATGGACTGG AAAGAAGGTG CCAAAAGTTC CCTCTGTGTT 120  
ACTCCCATT AGAAAATAAA CACTTTAAA TNATAAA 157

SEQ ID NO:2988

LENGTH:157

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03531

## SEQUENCE DESCRIPTION:

GATCAAANCA CCTNGGAGTG GTCACCAGGG GGACAGGGAG CCCCCCACCA ATGTATCANT 60  
 GGGTGATTAA TNATGCCCTTC TGCCCTTTGG CGAGTGAATG GNNTTCCCAT AGGGAAAGTT 120  
 GGCCTCCCTC CGTGAGCTTT GGAAATNTTT TCTAATN 157

SEQ ID NO:2989

LENGTH:157

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03532

## SEQUENCE DESCRIPTION:

GATCCGAATG GNCTGGGTGA GCACGAATTA CCGAGGCCTT CCCTTGNNTA CAGTCCAGGA 60  
 TTTGTAAGGN ATGAAGACCC CTGGNCCCCA TTCTNTTGGG GTCCATACAT ACTCTCCGAA 120  
 GATAGCAACT TGCTTCAGGT CAAAGTNAAC CCNAGAN 157

SEQ ID NO:2990

LENGTH:114

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03533

## SEQUENCE DESCRIPTION:

GATCTCCTTA CGTAGCAGCC AAAATAAATG AAGCAAAAGA CTTGCTAGAA ACAACCACCA 60  
 AACATTGATG CTTAAGGACC ACACTGAAGG AAAAAAAAAG AGGGGACTTC GAAA 114

SEQ ID NO:2991

LENGTH:155

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03534

## SEQUENCE DESCRIPTION:

GATCTGATT ACAAGAAAAA GTCAGAGCTA AACACTAGTG ATGGCATAGC ATTACTGAAA 60  
 TCATTGTTTC TTAATTTCAT TTTACTACAT TGTGAACCTG TGATTCAAGAT TCCATTTCT 120  
 CAGAGAATTA AAAACAAAAA AAGTACTCTT GTAAA 155

SEQ ID NO:2992

LENGTH:156

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03535

## SEQUENCE DESCRIPTION:

GATCTATTTC TNAGTATGTG GTTCATGCTG TTGTGAAAAA TGTTTACCT TTNACCTTG 60  
 TCAGTTGTA ATNAGAGGAT TTCCCTTNAC CCTTTGTAGC TCAGAGAGCA CCTGATGTAT 120  
 CATCTCAAAC ACAATAAACAA TGCTNCTGAA GGCAA 156

SEQ ID NO:2993

2153480

LENGTH:154

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03536

SEQUENCE DESCRIPTION:

GATCAAATTA GTAATTNNGT TTATGCTGCT CCTGATATAA CACTTCCAG CCTATAGCAG 60  
AAGCACATTT TCAGACTGCA ATATAGAGAC TGTGTTCATG TGTAAAGACT GAGCAGAACT 120  
GAAAAATTAC TTATNGGATA TNCAATTCTNN NCTN 154

SEQ ID NO:2994

LENGTH:154

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03537

SEQUENCE DESCRIPTION:

GATCTCATTT ATAATTAAAT TATGTCTATT GGATTGTTTT NATGTAATT NATGTTTTNT 60  
NAAGAAATTG TGATTAATAA TAACCTAACG ACTTTCTATT TTNCAGTTAT TTTAATTAGT 120  
TACTTCATTT AANCTTTGG CATTNCATGA TTTN 154

SEQ ID NO:2995

LENGTH:153

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03538

SEQUENCE DESCRIPTION:

GATCATATAT GTNTTAGTGG ACAGGGGTCT GAAGTACACT GGAATTACT GAGAAACTTG 60  
TTTGAAAAAA CTATAGTTAA TAATTATTGC ATTTTCTTAC AAAAATATAT TTTGGAAAAT 120  
TGTATACTGT CAATTAAAGT GTTTTGTGT AAA 153

SEQ ID NO:2996

LENGTH:153

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03539

SEQUENCE DESCRIPTION:

GATCAAACTA CACATGNGTT TTCATTCCAA AAGTGGGTT TAAANGCCTG GCTGCATCTG 60  
TATGNAATCA AGGCACACTC CAGGAAGACT GCCGCGTCGC GCCAACACGT CATACTCAAT 120  
GCCTCAGACT TTCATATTTC TGNNGTGCTG NNN 153

SEQ ID NO:2997

LENGTH:152

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03540

SEQUENCE DESCRIPTION:

01039

2153480

GATCCCAGCA TCTTCTCCAC TTCAGCGCTG AGTTCACTAT ACACAAGTGT CTGCTACAGT 60  
CGCCAAATCA CCAGTATTG CTTATATAGC AATGAGTTT ATTGTTA TTTGTTTGC 120  
AATAAAGGAT ATGAAGGTGG CTGGCTAGGA AA 152

SEQ ID NO:2998

LENGTH:152

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03541

SEQUENCE DESCRIPTION:

GATCATTGG ATATAGCAAT CTACTCTGAG AAATGGAACA CAAGGAGTTA CCTATCACTT 60  
TCACTTATAA TTCCAAAAGA TGACTACAAC CATGTCCATG CTCAGATTCA AACAGTTTC 120  
CATATCACTT TTGGGTGGTA ATTACAGTT TN 152

SEQ ID NO:2999

LENGTH:152

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03542

SEQUENCE DESCRIPTION:

GATCCCTGTN TGCNCNCCTC CTCTGCAATG TATGCCCTT GCCCCTTCCC CACACTAATA 60  
ATTTATATAT ATAATATCT ATATGANGCT CTTAAAAAAA CATCCCAACC AAAACCAACC 120  
AAACAAAAAC ATCCTCACAA CTCCCCAGGA AA 152

SEQ ID NO:3000

LENGTH:151

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03543

SEQUENCE DESCRIPTION:

GATCCAGAAG CAAACACAAG CAATGCAAGA CCTCCACAGA GTGAGCTTG AGAGAGAGAA 60  
AGCCAAGATA AGAGAGGAGT ATGANGAGAA ANTCAAGAAAG CTGGAAGATA AAGTGGAGCA 120  
GGNAAGAGA AAGANGCAA TGNGANGAN N 151

SEQ ID NO:3001

LENGTH:151

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03544

SEQUENCE DESCRIPTION:

GATCTGGAGA TAANTTATG CCTTGGCCA TAGACAGGAC TGGAATCCA GTTCTGCCAC 60  
TTACTGGCTG TTTGACCTA GGCAAGCCAC TCCTCCTTN TNAGCCTCAG TTTCTTNCC 120  
TGTAAAGATAA AAAGAATGAN TCATTACTAA A 151

SEQ ID NO:3002

01040

2153480

LENGTH:150

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03545

SEQUENCE DESCRIPTION:

GATCAGGGCT GGGGCGGGGA ACAAAGGGAA GGACCTTGG AAGGGCTGNN CCCAGGCCTG 60  
GGGGGCAGTC GTGGGAGCCC CTCTCANCTG TGGGGCTGGC ACAGAGCCCC AGGCAAGCTT 120  
TTAATAAACT GTTGGTTATT CTAACAGAAA 150

SEQ ID NO:3003

LENGTH:149

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03546

SEQUENCE DESCRIPTION:

GATCTAAAA ATAGGTAAATT TTTCTTTGCC GACCTGTAAA AGTGTGCCAA TACACTAAAT 60  
TTGTGATTT AAATTAATTC CTCCAGCTGT TGAAATGAAG TCTGCCAAAT CTTGCTCTAA 120  
CAAATAAAAT GTTATCTAAA TGAAGTAAA 149

SEQ ID NO:3004

LENGTH:149

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03547

SEQUENCE DESCRIPTION:

GATCCTAAAA GGGAAAATTG CCTTGGTAAC TTNAGATTG CTGTGGAATT GTGAATNCAT 60  
ACTAAGCTTT CTGTGCAGTC TCACCAATTG CATCACTGAG GATGAAACTN ACTTTNGTNT 120  
TTNNGAGAAA AAAAAGTGTN CTGCTTGTN 149

SEQ ID NO:3005

LENGTH:242

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03548

SEQUENCE DESCRIPTION:

GATCCTAGGA TGCGTCCCAG ACGCTCAGTC AGAAGTGCTG GAGGTGGGC CTGGGAAGCT 60  
GTATTTGTA TNAACTCTGG NGTTTTTGT CCATTAAGT GTATCTTGT CCATCCTATA 120  
AGNTTANNGG AAAGAAAAAG CATCTCAAAT NAGTGTAAAGT TGTTCTTGAG AAAAAAAATGT 180  
ATCAGACTTT TATGATTGA ATGAAATGTA TTATAGNAAA ANATAAACAC NTTAAANTA 240  
AA 242

SEQ ID NO:3006

LENGTH:148

TYPE:nucleic acid

TOPOLOGY:linear

01041

CLONE:HUMGS03549

## SEQUENCE DESCRIPTION:

GATCCAGTTG TACTTAAGTG TGTAACAGGA ATATTTGCA GAATATAGGT TTAACCTGAAT 60  
 GAAGCCATAT TAATAACTGC ATTTCTAA CTTTGAAAAA TTTTGCAAAT GTCTTAGGTG 120  
 ATTTAAATAA ATNAGTATTG GGCTCTAA

148

SEQ ID NO:3007

LENGTH:148

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03550

## SEQUENCE DESCRIPTION:

GATCATCGTG CTCTCAGACT CTGATTAGCT GCCTCCCCCTT CTCCCTGCCT CCAGAATGTT 60  
 CTGGGATAAC ATTTGGAGGA AGGTGGGAAG CAGATGACTG AGGAAGGGAT GGACTAAGCT 120  
 AATCCCCTTT TGGTGGTGT TCTTTAAA

148

SEQ ID NO:3008

LENGTH:148

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03551

## SEQUENCE DESCRIPTION:

GATCAGTCCA CCCAGAGTTA GACATTGTTT TTGTAGAAAA CAGGTATTTA TTATGTCTAG 60  
 GGTTTTGTGT TTTTTTTTT TCCTNANAGG NTAAAAGCCT TTATACAGAA ANAATTGGA 120  
 ACCTTNATA TAAAACCTTT TCTTTAAA

148

SEQ ID NO:3009

LENGTH:171

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03552

## SEQUENCE DESCRIPTION:

GATCGCTGTG GTTCTTATTA TCAAAATTAA GTTTACTTGT ATACGGAACA ACCACAAGAA 60  
 ATTTGATTCT GTAAAAGAATC CTCTTAGCT GTGGCCTGGC AGTATATAAA TGGTGCTTTA 120  
 TTAAACAGAA TACCTGTGGA GGAAATAAAG CACACTTGAT GTAAAANTAA A

171

SEQ ID NO:3010

LENGTH:145

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03553

## SEQUENCE DESCRIPTION:

GATCTTTTA TTTTGCAATC CTGGGCCAGC TAGAAGCCAG GAGCTGATTG ACCTTTAAC 60  
 TTTTTTCAGT GGCCACATTT TGGTTATCGA TGTACCTAGA AGTATGTAAA TNAGATTAAC 120  
 TTTCTCTCT GGAAACACCC TGAAA

145

SEQ ID NO:3011

LENGTH:144

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03554

SEQUENCE DESCRIPTION:

GATCATAGAG AATGGTGCTT TTTACTACAG TTGACACATG CATTAGA AACTACTACA 60

TGTTTAGAG AATCTTGCT GTGTATATGT AAACTGTATT GTTCAACTGT TAACAAATAA 120

TAAATTATTT CATTATTAAGAAA 144

SEQ ID NO:3012

LENGTH:144

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03555

SEQUENCE DESCRIPTION:

GATCTGCCT NCTCCTTCTA AAGGGTAAGT CATAATCTGT GTAATACTAC AATTNATGGG 60

NTGCTACTA TGCCCTGTT CTNTNCTAAA CAATTTACAT GTAATGTCTC ATTCCCTCAC 120

ATAACCCTG TAAAGTGGGC ANNN 144

SEQ ID NO:3013

LENGTH:142

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03556

SEQUENCE DESCRIPTION:

GATCCCCAGC TGCCTCACTT CTCTCTTGAG AACTTGGCTC AGGGCTCTG AGGACCTTC 60

CCAGCATTAC CTTCCCTTCC CTTGAAAGGC AATTGTTGGC TGTTTCATA AGCAGGAAAA 120

NTAACACAGAA GTATAAAGGA AA 142

SEQ ID NO:3014

LENGTH:142

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03557

SEQUENCE DESCRIPTION:

GATCAAATGT GCCTTAATAA ATTTNTTTTC ATTTAGATT CAAACAGTGA TAGACTTGCC 60

ATTTTAATAC ACgtcattgg AGGGCTCGT ATTTGAAAT AGCCTGATGC TCATTGGAA 120

AAATAAACCA GTGAACAATA AA 142

SEQ ID NO:3015

LENGTH:147

TYPE:nucleic acid

TOPOLOGY:linear

2153480

CLONE:HUMGS03558

SEQUENCE DESCRIPTION:

GATCTAAAGA AACAGTTGGC TGTAGCTGAG GGGAAACCCC CTGAAGCCCC TAAAGGCAAG 60  
AAGAAAAAGT AAAAGACCTT GGCTCATAGA AAGTCACTTT AATAGATAGG GACAGTAATA 120  
ATAAAATGTA CAATCTCTAT ATACAAA

147

SEQ ID NO:3016

LENGTH:140

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03559

SEQUENCE DESCRIPTION:

GATCCCAGCA ATGAACTGTT CTAGGGAAAG TGGCTTCCTG CCCAAACTGG ATGGGACACG 60  
TGGGGAGTGG GGTGGGGGGA GCTATTCCA AGGCCCCCTCC CTGTTCCCC AGCAATTAAA 120  
ACGGACTCAT CTCTGGCAA

140

SEQ ID NO:3017

LENGTH:153

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03560

SEQUENCE DESCRIPTION:

GATCTCAGCT TTGAGAACGCC TTCAGCTCCA GGGAAATCCAA GCCTCCACAG CGAGGGCAGC 60  
TGCTATTATTT TTTCTAAAG AGAGTATTTT TATACAAACC TACCAAAATG GAATAAAAGG 120  
CTTGANGCTG TGGCCTGAGT GCCTCACTGG AAA

153

SEQ ID NO:3018

LENGTH:134

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03561

SEQUENCE DESCRIPTION:

GATCACGAAG GTGGTTTCC CAGGGCGAGG CTTATCCATT GCACTCCGGA TGTGCTGACC 60  
CCTGCGATT CCCCAAATGT GGGAAACTCG ACTGCATAAT TTGTGGTAGT GGGGGACTGC 120  
GTTCGCGCTT TAAA

134

SEQ ID NO:3019

LENGTH:131

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03562

SEQUENCE DESCRIPTION:

GATCTATCTT NCAGAAAGTA TGTTTTCCCT CATAAAAGTG CCTCTTAATT GGCCATTGTA 60  
CCAGCCACTT GTCCTAGCCA AATGTCCAAA ACACGCCCTT GGGCCCCGCC ACGTTACAAT 120  
CCACANNNNN N

131

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SEQ ID NO:3020

LENGTH:131

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03563

SEQUENCE DESCRIPTION:

GATCACTGTN ATGTGTGGTC CATCTCTGAC CAAAACGTTA TGCAGTACGT GACTGTATCC 60  
TNATCCTCAA TAATCCTTGG TTATTATTCT AGAATTCAA ATAATGGAA TCATATCATT 120  
TACTATGTAA A 131

SEQ ID NO:3021

LENGTH:207

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03564

SEQUENCE DESCRIPTION:

GATCCAGTGA ATGATTCAAG AGAGCTACAT TTGAAGCCTG TACAAAAGCT TATCCCTGTA 60  
ACACATGTGC CATAATATAC AAACCTCTAC TTTCGTCAGT CCTTAACATC TACCTCTCTG 120  
AATTTCATG AATTCTATT TCACAAGGGT AATTGTTTA TATACACTGG CAGCAGCATA 180  
CAATAANCT TAGTATGAAA CTTAAA 207

SEQ ID NO:3022

LENGTH:130

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03565

SEQUENCE DESCRIPTION:

GATCCTGAGA ATTACTTTA ATAAAATCAT TTTTTGCTG TTATTAAC TAGNCNNGAA 60  
TTGCCCTAAAN CCAAGAACTC TGCTTGATAA AATAAGCATA GTNTTAGGAA CAGCCATGCA 120  
GATATAANTN 130

SEQ ID NO:3023

LENGTH:129

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03566

SEQUENCE DESCRIPTION:

GATCATCGAC CCCCAAGGGA CCCGCAGACC CTTAAAAAAA TCACCCACAA CCCTCTGGAA 60  
GTGGCCTTGC CCGGTCCCCT TCCCAGGGGC GAGGTCGGCA AAGCAACATG GCAGAGCAGT 120  
CATAGGAAA 129

SEQ ID NO:3024

LENGTH:129

TYPE:nucleic acid

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TOPOLOGY: linear

CLONE:HUMGS03567

SEQUENCE DESCRIPTION:

GATCACCTT TTTTTATGC GTTGTGAATA GCAGTCTGCA TCCTAAGTTT AAAATATTG 60  
AGAACCTCT ATGGGACTCT CTGTAAATNT TTTAAATACT GTTGTTCATAAAATATT 120  
TATACTAAA 129

SEQ ID NO:3025

LENGTH:129

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03568

SEQUENCE DESCRIPTION:

GATCAGCTGT CCTCTCTGAA AAAAATTGCA CCNNNTTTTC TTTTTAAAAA TTTTGTGCA 60  
TCTTCGTAGT AATGTAATTG TATTTATGC CTGCTTTTT ATAAAAAAAT AAAATAAAAT 120  
AAATGGAAA 129

SEQ ID NO:3026

LENGTH:129

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03569

SEQUENCE DESCRIPTION:

GATCTAAATN TGACTGTGGT TGCACATATC TGTGNATATA CTAAAAACCA NTGATTTGTA 60  
CACTTACAT GGGTGAGTTG TATGGTGTGT GAATTATATT TCAATAAAGC TGGGTTGTT 120  
TTTGTCAAN 129

SEQ ID NO:3027

LENGTH:140

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03570

SEQUENCE DESCRIPTION:

GATCCCAGGA TTCAGTATTG CTGGCCAGA GGNCNTGCT GGCTACTGGG TGTTAGTTG 60  
CAGTCCTGTG TGCTTCCTC TCTTATGACT GTGCTCTGG TTGTCAATAA AATATTCCT 120  
GGCCTCTGG AATCTNTAAA 140

SEQ ID NO:3028

LENGTH:127

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03571

SEQUENCE DESCRIPTION:

GATCCTACGA CAGGACCCAG ATGCCAGTGA AAGTGACCAC AGCCCTGCTC TAGTCACCC 60  
GGAAGCTGAC CAGTCTACGC ACGGCCGAAG CTTCGTCAAG GAAGTAAATG TAGTTAGAAA 120

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TCTTAAA

127

SEQ ID NO:3029

LENGTH:223

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03572

SEQUENCE DESCRIPTION:

GATCTAGAGT ATAAGCTGCG CAAGGGCAGA AGTTTTATC TGGTTGTTC ATGGATGTAT 60  
TCTAAGAGCT GAGAACAGGG CCTGGACACA ATAAGCATTC AATAAAATATT TACTGAATGA 120  
ATGAACTCCT ACCTATATTCT ATTTTATAA TTTGGCTCCA CTTTATCCTA CTTTAGCTCC 180  
CATTCAATTTC AATAAAAAAA ACATTTTTN GNACACATAT AAA 223

SEQ ID NO:3030

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03573

SEQUENCE DESCRIPTION:

GATCCATCTC AGTCAC TTTT TCCCCTGCAA TGCGTCTTGT GAAATTGTGT AGAGTGTTG 60  
TGAGCTTTT GTTCCCTCAT TCTGCATTA TAATAGCTAA TAATAAATGC ATAGAGNAAT 120  
TAAACTGTGA AA 132

SEQ ID NO:3031

LENGTH:123

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03574

SEQUENCE DESCRIPTION:

GATCCAGTT TNCTACAAAG AACAAAGTGG TTGACAACAG TGACAGTAAT TNCTGGAGCA 60  
AAACCAAAAG ACATAGGTAA AGANCATATA ATTGTTAATA AAGCACACTG CTTTCAACAC 120  
AAA 123

SEQ ID NO:3032

LENGTH:124

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03575

SEQUENCE DESCRIPTION:

GATCCAAGTG TTTAACAAAT TGGGGCTGTT AAGTCTGACC ATACATCACT GTGATAGAAT 60  
GTGGGCTTT TCANGGGTGA AGATACAAGT CTTAACACACA GTGTAACCTA CAGTTCCCT 120  
TAAA 124

SEQ ID NO:3033

LENGTH:270

01047

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03576

SEQUENCE DESCRIPTION:

GATCAGAGCA AGCCTGCCT CTTATCTTCG GGAAACCAGA ATATGTTGG GGTGGTAGGA 60  
GCCACACAGA CTCTTCTGAG CCCCTCACT CACTCCCTTC CCCCTGTGCC TTTCTTTGA 120  
GAGTGAAAGT GGGTNGAGTT GACCAAGAGAA AGGGGAGAGA ATTGGGAAA GACCCAAAGT 180  
NTTGTAAATT CTTCTTGTC CTTTACCTA CAGAAATGGT CACATGGTC TATTTAAATA 240  
GCCTAATAAA CACATCTGGA GCCTGTCAAA 270

SEQ ID NO:3034

LENGTH:127

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03577

SEQUENCE DESCRIPTION:

GATCTCAAAG ATACACAGTA CCTACTTAAT TCCAGCTGAT GGGAGACCAA AGAATTGCA 60  
AGTGGATGGT TTGGTATCAC TGAAATAAA AAGAGGGCCT GGGATTCTT GCGATTCCAT 120  
CTCTAAA 127

SEQ ID NO:3035

LENGTH:120

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03578

SEQUENCE DESCRIPTION:

GATCCCTACC TGCTCCCCGC TCCGGTTGCC AGCAGCACTC ACTGCCTCC TTTGTATAT 60  
ACTCTGCATC ACTGTACATC TCACANCTTC GTGAATAAG TTGTGTGCTT TATTCGTAAG 120

SEQ ID NO:3036

LENGTH:120

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03579

SEQUENCE DESCRIPTION:

GATCAGGGAC CTCACGCATC TTTTCTCAT ATACATGGNC TCTCTGTGG CCTGCAAACA 60  
CATTTNCTTC TCCGCTTATN AGACTATTAA NCTTAATAA AGCACTGGAT ATAAATCAAA 120

SEQ ID NO:3037

LENGTH:176

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03580

SEQUENCE DESCRIPTION:

GATCTAAAGC TNAACAATGA AAATCTTCAG CAGAAATAGA AATNGCCGTG GATTGTAATA 60

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CACACTGAAA TTCTNACTTT CTGAATTAA ATGTAGAATA AATTNACCA ACTTGGAGTA 120  
CTGTATGAGT ATTCNAGTA GGGGAAATAA ACTCAAANTT ATATTTNTNT TGCAAA 176

SEQ ID NO:3038

LENGTH:119

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03581

SEQUENCE DESCRIPTION:

GATCTGAAAT GTCTGAGGT AATAGTTCT GTTGAATTT TTTTGTCA TTTTCTGCA 60  
CAGTCCATTC TGTTTNATT ACTATCTAGG CTTGAAATAT ATAGTTGAA ATNATGAAA 119

SEQ ID NO:3039

LENGTH:234

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03582

SEQUENCE DESCRIPTION:

GATCAGAATA TGACATTGCA GTAAAGNGCT TAAATAGTTT CATCTNTGGT TTTTTTTCT 60  
AGACACTTTT CTTTTATCCC AGNCATCTCT GAATTTACAT TTTATATTAA AGAAATTGAG 120  
CTATCCATAC AACCTGTATT TACTTTAATT TCACTATGCT TTCAGCTAC TTTATTGTAT 180  
GNTATGTAGG TCTAAAATAT AGTTGAGTC AAATAAAATT AGGGGGGCTT TAAA 234

SEQ ID NO:3040

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03583

SEQUENCE DESCRIPTION:

GATCATGACA CTNAAGCGTG ATGAGACGCT CCAGGATGGC TGTNATACTC ACTTCTGCAA 60  
GGTCAATGAG AGAGGAGAGT ACTTCTGGGN GAAGAGGGTC ACAGGCTNCC CACCCTTNA 120  
TGAACACANG TN 132

SEQ ID NO:3041

LENGTH:118

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03584

SEQUENCE DESCRIPTION:

GATCCCTAAA AATGTTGAGG GACTTCTGTT CATTGATCCC GAGAACATTG GCTTCCACAT 60  
CACAGTATCT ACCCTTACAT GGTTAGGAT TAAAGCCAGG CAATCTTTA CTATGAAA 118

SEQ ID NO:3042

LENGTH:117

TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS03585

SEQUENCE DESCRIPTION:

GATCGGACCG TTCATGCTGC CTATAGGCAT TATGTCCCTC AAAAAAAAAC TCCTTNCCT 60  
GCATCCTGTG TACAACATGA CATTAAAC CAATCCAATC TAAAAATGTN CCAGAAA 117

SEQ ID NO:3043

LENGTH:117

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03586

SEQUENCE DESCRIPTION:

GATCAGAAGT GGCAGTCTAT AACTNAAAAT GTGGTAAAGT ACTTGANGCA AACATCCCGC 60  
ATCGCTGTG GACCTCTNAN ACTTTCTACT TTAACAGTTT CACAGTCCTT NCCAGTN 117

SEQ ID NO:3044

LENGTH:116

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03587

SEQUENCE DESCRIPTION:

GATCTCCTCC ACCCTGTACC AGGCAGCAGC TCCAGTCCTC ACACCAGCA AGGTACAGG 60  
CAAGAGCAAG AAGAGAAACT GACCTGAAT GTTCAATAAA GTTGATTCTT TGAAA 116

SEQ ID NO:3045

LENGTH:116

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03588

SEQUENCE DESCRIPTION:

GATCTGAAAT CNNGGTCTTC CAAGGNAGAA AATCGANCTG GGAATAAAAG AGAAGACCTG 60  
TGATGGGCA GCAGTGACGC NCTGTGGGG GACAGGTGGA CGTGGAGAGC TCTTN 116

SEQ ID NO:3046

LENGTH:116

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03589

SEQUENCE DESCRIPTION:

GATCCTGAAG AAATCATATG TTAAACATAC TTTNACACCT ACTGTGTTAT AAAATATATC 60  
ATCAGATGTG CCTTGAGAAT AGTATATGTA ACATTAAGAA AAAGTTGCTG GCTAAA 116

SEQ ID NO:3047

LENGTH:115

TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS03590

SEQUENCE DESCRIPTION:

GATCCTTGG A CTTGTGTT TTGATTNTAT GTTGATATT C TAAAAACATC TATTTAATG 60  
TTATTTCTGT T CTAAAAATA AGATAATAAA TATTAACAAA CTTTGCTTT TTAAA 115

SEQ ID NO:3048

LENGTH:179

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03591

SEQUENCE DESCRIPTION:

GATCTCAACA AGAACGCTGTA TTTTAAGTAT TAAGACAGTT CTTTGTAGC TGGTTTCTAG 60  
TTGGTTATCT AGTTACCAAT GCTGCAGTC C TGCA GT CACC TATA CATTAT TTAAATNTAT 120  
TTAACTGTTA AATGCGCTAC CCACCAATAA TGAAATAGAC CTTTATGAAA ACTGTGAAA 179

SEQ ID NO:3049

LENGTH:239

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03592

SEQUENCE DESCRIPTION:

GATCCTGAGG AAAGACTTGG AAGAGACCAAG CATGTCTCA GTAGCCAAAC TACTTCTTGA 60  
GCATAGATAG GTATAGTGGG TTTNCTTGAG GTGGTAAGGC TTTGCTGGAC CCTGTTGCAG 120  
GCAAAGGAG TAATTGATT AAAGTACTGT TAATGATGTT AATGATTNT TTTAAACTC 180  
ATATTATTGG GATTTCAACC CAAAATAATG CTTTTGAAA AAAGGAAAAA AAAACCGGN 239

SEQ ID NO:3050

LENGTH:114

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03593

SEQUENCE DESCRIPTION:

GATCTTGCT TTCTNTTCC TCTTCTCCTN CAGGGTGTCT GTNACTGCNN GGTACTTCCA 60  
GCCAACCTCG TGAGCCAGGC GCCCCAGATA GGCAAACCTT CTTGTAGGCT TCAN 114

SEQ ID NO:3051

LENGTH:113

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03594

SEQUENCE DESCRIPTION:

GATCTGTATA TGCTATCCTA ACTGTTAATT GTATTATTGA TTATNTTGAT TATCTTGCTT 60  
GAAGGTTCAT ACTTTCAAT TTGATAGAAA TAAAGTTTT NCCTGCTTAT AAA 113

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SEQ ID NO:3052

LENGTH:113

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03595

SEQUENCE DESCRIPTION:

GATCCTCTCT TCATTTACT CAGCCAGGTT TTGTACTGAT GTACAGGTGT TAAATNACTT 60  
CAAGTATTG TGTAAGAGGT GTATATAATT CAATAAAAAA GGTAAAACAT AAA 113

SEQ ID NO:3053

LENGTH:161

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03596

SEQUENCE DESCRIPTION:

GATCGACAAG GAGTACTTGC TAAAAATGGC AACAGAGGAG TGAGGAGTGC TGCTGTAGAT 60  
GACAACCTCC ATTCTATTT AGAATAAATT CCCAACTTCT CTTGCTTCT ATGCTGTTG 120  
TAGTGAAATA ATAGAATGAG CACCCATTCC AAAGCTTAA A 161

SEQ ID NO:3054

LENGTH:111

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03597

SEQUENCE DESCRIPTION:

GATCCGNACC CCAAGCCCCT GCAACCCACG CTCGGTCCCG TTCCGGCCCC TGCNCCCCGC 60  
TGCNCTTCGC TCCCCGNCCCT TGCNCCGTTA GTAAACATCG CTCAAACGAA A 111

SEQ ID NO:3055

LENGTH:110

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03598

SEQUENCE DESCRIPTION:

GATCTAACAA GTTACATTGT ATAGTTCTG GGACTGTTG AATATTCTAT TCCAATGGGC 60  
ATTATTTTTT TATCCTGTCA TTAAAAAAAAA AAGACTGTTA CCTTGCTAAA 110

SEQ ID NO:3056

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03599

SEQUENCE DESCRIPTION:

GATCTCTCC ATCCTGCTGC CCACCCCTCT TGAGTGTCTT AAGGGACAGA NCTTCCACC 60  
CCTGGAAGAT GGAAATAAAC CTGCGTGTGG GTGGAGTGTGTT AGGACCAAA 109

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2153480

SEQ ID NO:3057

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03600

SEQUENCE DESCRIPTION:

GATCAGAGTG TTNTAAATCA TCACGCCCTT AGCTTATCCC TNGTCGAGCC AGGACACGGG 60  
GTGCTTCAGT GGGTCTGTNA CCCTCTCTCC TTGAAGCATG TTGCTGNNN 109

SEQ ID NO:3058

LENGTH:108

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03602

SEQUENCE DESCRIPTION:

GATCCCTGAA TGTGAACCTG AAGTTCAAAG GACTTGGAAA GCTCTGGAAT GTGTTGGTTT 60  
TTCCCCCCCA AAATGGGTCC TAAGGAGGGT AAAGTGACTT GTTTCAAA 108

SEQ ID NO:3059

LENGTH:108

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03603

SEQUENCE DESCRIPTION:

GATCAGTTTC TTTNGCTTCA AGATTTGAAA CCAGAAAGGA AAGTCCNACT TGCAGATGAT 60  
TGTCCCTAAA ACCTAATGGA AAANTAAAAG ANAGACATAC CATGGAAA 108

SEQ ID NO:3060

LENGTH:107

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03604

SEQUENCE DESCRIPTION:

GATCCATCAT TGTTCACAAA CTTCACTGTC AAGAACCTTT TCGTTGCATA ATGTGCAAAT 60  
AGTTAAAACC ACTGTACTAT ATACTAAAAA ATGATTAAGA TAGTAAA 107

SEQ ID NO:3061

LENGTH:252

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03605

SEQUENCE DESCRIPTION:

GATCTGGCAG CTGAGGCCCG AGGCAGGGTT GGNGTGATGC CAGGGCAAAG TGGTGAGGAG 60  
AAAACAGGAA NCGGGCTTTC NCCNCATTGG TAAATGGGAA AGAGGTGAGC AACTTAAGAT 120

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2153480

TGTCACAATT AATCACAAAGT GTACAGGATT AGACTGGTT TATATTAAC TCTGCTNCA 180  
TAGGTGTACC ATTTAAAGAG TGTTATTTAA TGCTAAGTTT AACTGCTTA ATAAAGTTA 240  
TTTTAAATA AA 252

SEQ ID NO:3062

LENGTH:103

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03606

SEQUENCE DESCRIPTION:

GATCACACAAA ATAACCTGTA TCTCCTGCTT AANTCCTTA TACTACCTGG NGAAAAGTAT 60  
TTCCCATATT TCCAATAAT GTCAGACACT ATTGAGAAAG AAA 103

SEQ ID NO:3063

LENGTH:103

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03607

SEQUENCE DESCRIPTION:

GATCCTGNAT NANGCCCGGG CCAGCGAGTG CAGGGACGTG GAGGGNTCA AAACCGAGAT 60  
GGCCATGCTG GTGACCCAGG CCAGGAAGAA CACCATCAC CNN 103

SEQ ID NO:3064

LENGTH:159

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03608

SEQUENCE DESCRIPTION:

GATCCTCAC A GTCAAGTGAC GAGGCCTGGGG CTGAAAGCAG AAGCATGCAC AGGGAGGAGA 60  
CCACTTTAT TGCTTGCTN GGTGGATGGG TCAGGAGGGT CTGAGGGCCT GTCCCAGACA 120  
ATAAAGGTNC CCTCAGCGGA TGTGGGCCAT GTCACCAAA 159

SEQ ID NO:3065

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03609

SEQUENCE DESCRIPTION:

GATCCTATCG CCTTNAGTA GAATATGAAA TATTCTTNA GAAATCCAAT ATAAATAGGT 60  
TATAATAGCC ATATNCTTNA TNACTTTATT GAGATATAAT TN 102

SEQ ID NO:3066

LENGTH:186

TYPE:nucleic acid

TOPOLOGY:linear

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2153480

CLONE:HUMGS03610

SEQUENCE DESCRIPTION:

GATCTNAGCT CCCACCTCCC TTCCCCCTA CTGCACTTC CCCCTCCCC CCTTCCAAAA 60  
CCTGCTTCCT TCAGTTGTA AAGTCGGTGA TTATATTNT GGGGGTTTC CTTTNATTTN 120  
TAAAATGNA AATTATNTA TANTCCGTAT TTAAAGTTGT AAAAAAAATA NCCACAGAAC 180  
AGNGAN 186

SEQ ID NO:3067

LENGTH:100

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03611

SEQUENCE DESCRIPTION:

GATCTCAGAC AGTGTGCGGC GGCACATGAG CGGCTTCG CAGTGTCTG TNTGAGCCA 60  
CTGCAGTCTG GGCCCCATCA TTAAACGGGC TGCGTTAAA 100

SEQ ID NO:3068

LENGTH:98

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03612

SEQUENCE DESCRIPTION:

GATCTCCAGT NAGACTCCAG GGTTCTAGAC AGAGGCCAGT NTTGGCCACT CACCCACAC 60  
CCCGCGGACC CCAATAAAGG CTTGCATAGC TCCAGAAA 98

SEQ ID NO:3069

LENGTH:98

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03613

SEQUENCE DESCRIPTION:

GATCCTGAAG CTTNACCGGG CTCCAAAGGG CAAATGGAGC TGCCCTCNTC TGTATCAGGT 60  
TTATTGGTTG TACATATAAA TNATACTTNC CTTTCAA 98

SEQ ID NO:3070

LENGTH:107

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03614

SEQUENCE DESCRIPTION:

GATCCTGTT AACAAAGATA CTTGAGACAT CCATTTGTT TAATGAAATC TGTATGGATA 60  
TGGAAATNCT TGCCCTAATA AAAGCCTACA TATACCTTCT GTTAAA 107

SEQ ID NO:3071

LENGTH:97

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2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03615

SEQUENCE DESCRIPTION:

GATCTNTCCG TTCTCAGGCC AGACCCCTGG TGCTGCCGTT AATTTTTTT TCTCTGTCTT 60  
TGCTGCAATN TTNAATAAAA ATGCCAAAGA ACACAAA 97

SEQ ID NO:3072

LENGTH:95

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03616

SEQUENCE DESCRIPTION:

GATCCTAACAC AAATCATCTT TGTCAGTTAA GTATAGTTGC GCAAAAATTG TTAAATCCTT 60  
TGTCTTATT AAAGAAAAAT TTGAGTAACA TTAAA 95

SEQ ID NO:3073

LENGTH:94

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03617

SEQUENCE DESCRIPTION:

GATCTAAGTG ATGAGTCTAG GTGTGTTATT GTNCAGTTT TNCAACTTC CTGGAAAACG 60  
AACTTTCAA AATAAAAAAT TGGAAAAATA GAAA 94

SEQ ID NO:3074

LENGTH:183

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03618

SEQUENCE DESCRIPTION:

GATCACTTTG AGAAACAAAC TTTTATTAAA TGTAAGGCAC TTTTCTATGA ATTTAAATA 60  
AAAAAATAAA TATTGTTCTG ATTATNACTG AAAAGATGTC AGCCATTCA ATGTCTGGG 120  
AAACAATTT TTGTTTTGT TCTGTTTCT TTTGCTTC AAAAAACAAT AGCTGGCTCT 180  
AAA 183

SEQ ID NO:3075

LENGTH:92

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03619

SEQUENCE DESCRIPTION:

GATCTGCCAT ATTTGNTNTT GGTTTAATT TTCATATCCA GCCTAAAGGT GGTTGTTAT 60  
NATATAGTAA TAAATCATTG CTGTACAATA AA 92

01056

2153480

SEQ ID NO:3076

LENGTH:92

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03620

SEQUENCE DESCRIPTION:

GATCAGGCTG CCTCCTGGNT TGGNTGTCGG GGGAGCTGTC CGGCAGCCTG GCAGGGAGAT 60  
GCAAGGCCTA AAGTAAAATT TTNTCAAGTA AA 92

SEQ ID NO:3077

LENGTH:91

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03621

SEQUENCE DESCRIPTION:

GATCTAGCCC CTTCTTCAGG CCGAGAGAAAT TTCGAGCGTT ANCCGTCTCT TGGCCACCAG 60  
CTAAATAAAC GGATTCTTCA TGTGTCTCAA A 91

SEQ ID NO:3078

LENGTH:91

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03622

SEQUENCE DESCRIPTION:

GATCTGCTAT TGTTATTCT CCTCTTTATT GGAAAAGGC CTCAGTTTA ATTATTTCT 60  
TCCCAAAATA AATNACACAT TTGGTTACAA A 91

SEQ ID NO:3079

LENGTH:239

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03623

SEQUENCE DESCRIPTION:

GATCCTGCAT CAGCATTGTA TATATGGNCT TAAGTGCCTG GCCTCCTTAT CCTTCAGAAT 60  
ATTTATTTNA CTTACAATCC TCAAGTTTA ATTGATTTA AATATTTCC AATACAACAG 120  
TTTAGGTTTA AGATGACCAA TGACAATGAC CACCTTGCA GAAAGTAAAC TGATTGANTA 180  
ANTAANTCTC CGTTNNNTTC ANTINATTTC AGTGTAAATGA NAANGTTGCT TAGTATTN 239

SEQ ID NO:3080

LENGTH:196

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03624

SEQUENCE DESCRIPTION:

GATCCCTGCC CTGCACCAAGC ACCCTGANAT GGAGCTGAGA CTTTATTAT TGGGGTAGG 60

01057

2153480

GGGATGGAGG AGGTCCCTCC AACATGTTG GACCCAGCTC CTTGGGTTTC AACTGACACC 120  
CCTGCCCTG CCCCTGCCCA GAACCAAGTG CCATTCTCA CTCTGGAGCC TTAATAAACT 180  
GCAATTGTA TCCAAA 196

SEQ ID NO:3081

LENGTH:90

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03625

SEQUENCE DESCRIPTION:

GATCTGTGTA CTGTTTACTT CCCACTTCCC AGAATCCCTT GTATCTCCTT TCTCGGGAAT 60  
TGTATTTCT AATAAATGAC ATTGAGAAA 90

SEQ ID NO:3082

LENGTH:90

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03626

SEQUENCE DESCRIPTION:

GATCTCTGGA AGTGTAAATTN TGAAAGAAC TTNCCTGCAG CTTAACAAA ATGAGAACT 60  
TNCCAAATAA AACTGTTTT GAAGTTAAA 90

SEQ ID NO:3083

LENGTH:89

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03627

SEQUENCE DESCRIPTION:

GATCCTCGGG AAGAACAAAG CAAAGCTGC CTTTGTCTG TTATTTATT TTTTGAACT 60  
TTAAATAAAG TTTACTAATT TTGACCAAA 89

SEQ ID NO:3084

LENGTH:88

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03628

SEQUENCE DESCRIPTION:

GATCAATCTT TGATGGTGAG GGTTTAGAA AGGAAAATA TAGAAAATG TGTAATTGT 60  
CTTAATAAAA TCTATCTNTA CATCTAAA 88

SEQ ID NO:3085

LENGTH:94

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03629

01058

2153480

SEQUENCE DESCRIPTION:

GATCTAGATT GGGTAGGGGG GACGGGGATG TNAGGGAGGC AACTGTGTTN TGTTACTGTG 60  
TCAATAANCT GGTTAAAGT TGTAAAGTGN GAAA 94

SEQ ID NO:3086

LENGTH:89

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03631

SEQUENCE DESCRIPTION:

GATCTGAATT TCACAAAAAG TTCATGGAGA AATATATTTAA ATAGTACAGT TTTATGTGCT 60  
TAATTAAAGA CTGTAACACG TAAAGGAAA 89

SEQ ID NO:3087

LENGTH:84

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03632

SEQUENCE DESCRIPTION:

GATCATACCA CGGCACCTCCA GACTGGGGAC CAAAGTGAGA CCTTGTTCT AAAANTTAAA 60  
ATATTTAGAA TGTTCCCTAG CAAA 84

SEQ ID NO:3088

LENGTH:82

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03633

SEQUENCE DESCRIPTION:

GATCCCAAGG ATGGAGAACAA ACTTACCCAG TAGCTAGAAT GTTAATGGCA GAAGAGNAAA 60  
CAATAATCA TATTGACTCA AA 82

SEQ ID NO:3089

LENGTH:81

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03634

SEQUENCE DESCRIPTION:

GATCTCCAGA TGTGCATTC CCTCTCTTAT TTTAAGTTAT GTTAAGATTA CTAAAACAAT 60  
AAAAGCTCCT AAAAAATCAA A 81

SEQ ID NO:3090

LENGTH:79

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03635

01059

2153480

SEQUENCE DESCRIPTION:

GATCCAACCG TGCCTGAAGC TAGAATATCC CCTGGACTTT TCAGTTATGT GAACCAATAA 60  
ATACCCCTTT TTGCTTAAA 79

SEQ ID NO:3091

LENGTH:78

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03636

SEQUENCE DESCRIPTION:

GATCTGNGAN ATATTATGGT AATTGTGTCG GGGGCCATG AACCGCACCC ATATAACACG 60  
GTAAACTTAA TCAGCAAA 78

SEQ ID NO:3092

LENGTH:77

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03637

SEQUENCE DESCRIPTION:

GATCATGCTG AAAACCACTC AAACGATTAT ATTTTTACA TTATAAGAAG TAAAATATAT 60  
TATTCTGAAT AATGAAA 77

SEQ ID NO:3093

LENGTH:75

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03638

SEQUENCE DESCRIPTION:

GATCTGTGCA TTGCTCCTTC TGATTTGTGC TAAGTTGTTA AATAAGAGGG ACCCTGAGAA 60  
AGGCCTTACT CTAAA 75

SEQ ID NO:3094

LENGTH:75

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03639

SEQUENCE DESCRIPTION:

GATCACACAG CTAACGAGGC TGCCTCCAGC ATTCCTGAT TTCCTCTGTG GTAATAAAAG 60  
CTTTCTGTGC TTAAA 75

SEQ ID NO:3095

LENGTH:78

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03640

01060

2153480

SEQUENCE DESCRIPTION:

GATCAGAACT TACAAAACCAA ACTTTTATTG TGAGAAACTG GCTGTACAAT ATNTGAAAAG 60  
AAAGTGACAT GNAGGAAA 78

SEQ ID NO:3096

LENGTH:74

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03641

SEQUENCE DESCRIPTION:

GATCTTTTN AAGTNTTCTG AAAGGAAGTA GACAGTATTAA CACCCCTGAAT AAATAAGGTG 60  
TTGTTTCCA CAAA 74

SEQ ID NO:3097

LENGTH:267

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03642

SEQUENCE DESCRIPTION:

GATCTACTTC CCATGCAGAA GAGAAGTCAC ATCTTCCAGG GAATCGCAAT GTTGTGGCGT 60  
CTGACTTGTG TGTACACATTG GTGTAAAATG GTATATNCTT TAAAATAGTG TTGATAACTG 120  
GAATATTGTA TGTATGCTTG GAGATGCTTT GTGTGAACCT AAGACTGTCA CTCAACAGAT 180  
GTTGGATTGG GGNAAATCCA AAGCACAAC TCAAANTAAAN NTACATTTT AGGTTTCGAT 240  
GCTGCAAANC ANANAANANN ACANNAN 267

SEQ ID NO:3098

LENGTH:73

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03643

SEQUENCE DESCRIPTION:

GATCATGGTG ATGTACGGGG TGAATTCTCT TGCCGTGTTG CAAATGTGTA AAATAAAGAT 60  
TATCTGGCAG AAA 73

SEQ ID NO:3099

LENGTH:71

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03644

SEQUENCE DESCRIPTION:

GATCCNAGNT CTANCCTCAT ATAATCATTAA AATATAATTAA AAGTTAATT GCTGAAATAC 60  
TTATAATGAA A 71

SEQ ID NO:3100

LENGTH:69

01061

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03645

SEQUENCE DESCRIPTION:

GATCATGCAA TTCCTTCAAT TATGATGGAA AGACTTGAAC TTTCTGAAAT AAAACAAAAA 60  
TACAGCAAA 69

SEQ ID NO:3101

LENGTH:67

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03646

SEQUENCE DESCRIPTION:

GATCCATT TA TTGCAATTCA TGCTGAATCT AAATTATAAA ATTTAAAATT AAATGCATAT 60  
CCTCAAA 67

SEQ ID NO:3102

LENGTH:65

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03647

SEQUENCE DESCRIPTION:

GATCCGAAAC CTGTTAAACA ATAAGATGTG TTCTCGAAA ATNAAACAAG AGGTATCACA 60  
AGAAA 65

SEQ ID NO:3103

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03648

SEQUENCE DESCRIPTION:

GATCATCTCT TCTCCATAAG ATAGTGTGAT AACACAGTC ATGAATAAAG TTATTTCCA 60  
CAAA 64

SEQ ID NO:3104

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03649

SEQUENCE DESCRIPTION:

GATCGCTCCA ATAAACATAT ATTGTGAAAA TGCATCCACA ATAAATGGAA TTCCTTCCTG 60  
CAAA 64

SEQ ID NO:3105

LENGTH:63

01062

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03650

SEQUENCE DESCRIPTION:

GATCTACCTG TCTTGTGCC ACATGTTCT AAACTTCCA ATAAATCACC TTCTACTGAC 60  
AAA 63

SEQ ID NO:3106

LENGTH:68

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03651

SEQUENCE DESCRIPTION:

GATCAGCATC AGGCTGTTAT CAAGTCTGTT GGTGCTAAAA AGTAAAANAT GAAATGTTCA 60  
AAGAGAAA 68

SEQ ID NO:3107

LENGTH:58

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03652

SEQUENCE DESCRIPTION:

GATCTGTCTG GCTCCNTTGT TTCTTATTAA ATAAAATTCT GTCTTCTATT GTTTCAA 58

SEQ ID NO:3108

LENGTH:58

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03653

SEQUENCE DESCRIPTION:

GATCAGCCTT NNTATAATGT TTTTAAATC ATTTCTAAAT AAAACAGAAA TACAGAAA 58

SEQ ID NO:3109

LENGTH:55

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03654

SEQUENCE DESCRIPTION:

GATCTAGACT TATATGAATA AATNAAATTA CATGCCAAGG GCCCTAAAAA GCAAA 55

SEQ ID NO:3110

LENGTH:53

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03655

01063

## SEQUENCE DESCRIPTION:

GATCAGGGCC GAGCAGAAC CCACTCTTCC CAAATAAAGC TTCCCTCCTTG AAA

53

SEQ ID NO:3111

LENGTH:55

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03659

## SEQUENCE DESCRIPTION:

GATCATATT TTTNATACAG GTATTCAAT TAAAATGTTT TTGTACATAG TGAAA

55

SEQ ID NO:3112

LENGTH:76

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03661

## SEQUENCE DESCRIPTION:

GATCCAATCA NTTAAATAAA CCTGTATGTA TATGCATATG TNTACATGCA TATCCCCTCC 60

TGCTAAAAC TATAAA 76

SEQ ID NO:3113

LENGTH:451

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03679

## SEQUENCE DESCRIPTION:

GATCCCTCAG TTTCTCTTG ATTCAGCAT GTNTCGGGTT CCTAATTAT GGTATGAGTT 60

AGCAAATTAA ACCATTGTGT TTGTGCCCTA CCCAGGGAC TCCCCAGTTT CTGACTTGAA 120

GTAGACTGAG AAGAATCCAC GAGGTGCTAT CTGGCCAGAT TTAAGTAGAT TCTATTTCCT 180

TGGTTCTCCC TCTCCCTGAG GACCTCTTAT TTNATTGTCC CCTCTTCTAG GTTAATTCTC 240

CTTGATTTG ACTTTGTTGA GAAGGGAGGTT GGACAGTAGA TTAGCAAAGT TCCAAGTGCA 300

AAATTACAGT GTGTTAGAGT GTGGGGGGAA AATTAGTCTT ATTTTCCT ACATGGATA 360

CAACACTGTG AATTCAATCT TCAACCTGAA GGGCCCTGCA GTTCCTCCTA AAACATNGTT 420

GTTTGNNTTT CTTAACCAA GGTTAACGCT N 451

SEQ ID NO:3114

LENGTH:445

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03680

## SEQUENCE DESCRIPTION:

GATCTAAGGA TGACTTGGAC ACACCTCCNTG GCACTGAAGA GTCTGAACAN TGGCCTGTNA 60

TTGGTCCATT CCAGGACCTT CATTGCATA AGGTATCAAA CCACANCAGC CTCTGATTGG 120

CCATGGCAG ACCTGCACTN TGGCCAATNA TTGGTTCAATT CCAGGACATT CATTGCATA 180

AGGAGTCAAA CCACANCAGT CTTGGATTGG CTGTGAGCCA ATTCAACCTCA GTCTCTAATT 240

2153480

GGCNNNGAGT CAGTCTTCA TTTACATAGG GTGTAACCCT CAAGAAACCT CTACAGGGTA 300  
CTTAAGCCCC AGAAGATTT NCTACCAGGG CTCTTGAGCN ACTTGCTCTA GCCCACCTCC 360  
ACCCCTGTGGA ATGTNCTTC ANCTTTGNT TGTTTCAAG TNCCCTGGTG CTTCCAATAA 420  
NTNCCACTTC CTTCACCACC CNAAA 445

SEQ ID NO:3115

LENGTH:439

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03681

SEQUENCE DESCRIPTION:

GATCGGCCGC ACTGCTGTCC TGCTGGCTTC NNCTGCGCAG CANGGGTAC CAAGTGTNN 60  
CCCAGGGAGG CCCCCGCGCTG GGACGCCCT TTAAGGGACC CAGCCTGAG ACAGCTGCTG 120  
TAAGGGACAG TACTGAAGAC TCTGCAGCCC TCGGNACCCC ACTCGGAGGG TGCCCTCTGC 180  
TCAGGCCTCC CTAGCACCTC CCCCTAACCA AATTNTCCCT GGACCCCAT CTNAGCTCCC 240  
CATCACCATG GGAGGTGGGG CCTCAATCTA AGGCCTTCCC TGTAAGAAGG GGGTTGTGGC 300  
AAAAGCCACA TTACAAGCTG CCATCCCCTC CCCGTTNAG TGGACCCGTG GCCCAGGTGC 360  
TTTCCCTAT CCACAGGGGT GTTTGTGTG TGTGCGCGTG GTGCGGTTN AATAAANGTT 420  
TGTACAACCT NTGTTAAA 439

SEQ ID NO:3116

LENGTH:431

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03682

SEQUENCE DESCRIPTION:

GATCTGAAG TGCTTTTAT ACAGCTCTCT ATAATTACA AATATCCAA AGTCATTCT 60  
TGGAACACAA GTGGAGTATG NNAAATTNNN TATGAATTT TCAGATTATC TAAGCTTGCA 120  
GGTTTTATAA TTAGAAGATA ATGTGAGANT TAATGGGGTT TATATTACA TTATCTCTCA 180  
ACTATGTAGC NCATATTACT CACCCATGA GTGAATCTGG AATTGTTTT CATGTGAAAT 240  
CATTGTGGTC TATGAGTTA CAATACTGCA AACTGTGTTA TTTTATCTAA TCCATTGCTT 300  
AATGAGTGTG TTTTCCATG ATTGAATATA CCGTGGTTCA TATGTTAGCA TGGCAGCATT 360  
TTCAGNTAGC TTTTGGTTT GTGGGAAGT TGGGGTTTG GGGGGAGGGG GGAGTNTTNG 420  
TACGTTGCCT N 431

SEQ ID NO:3117

LENGTH:427

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03683

SEQUENCE DESCRIPTION:

GATCAAAGTA TTATATGCTG TGTGCTTTA AGGTGTTGT AAGTACTGAA AAAGGCAAAA 60  
ATNCCTTCTA CATTGACATT CATTCTATT TNACTGGCA CCTATGAATG TATGCTGTGT 120  
GCTAGAAATA GACTAAAACA TATTCTATA GCATGTNAGT GTGTTGCAT GTTGCTGAA 180  
AATCCTTGT GTATAANCCA GTTTGTAAGG TTCTCTGGGT TAGGTAGGGA CTCTGCAGTT 240

01065

2153480

TCTNCCTGTC NAAATCTCTC CTACCAAGAT GGTGTTCCAC TGTCCAGCCC AGCATGAGTA 300  
GCAGGGTAGNG CACAGCTTCA CTGGCTGGTT TGTATGCTT GGTTTAGGT GCAATTGTTG 360  
TGGGTNGATT TACTTNTCC AGAAAACCAT NGTATTGNNN ATGTCCTNGG ACCGGTGGAA 420  
AATAGGN 427

SEQ ID NO:3118

LENGTH:423

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03684

SEQUENCE DESCRIPTION:

GATCAAAAAT ATTAGAAAAA ATAAAANTAA TACAAATAAA AATACAGTAT AACAGTTATT 60  
TAAATAGCAT TTACATTGCA TTAGGTATTA GTCTAGGGAT AAAGTATACA GGCGGATGTN 120  
CGTTGGTTAT ATACAAATAT GTCATTTTAT GNAANNGACT TGAGTATACT TGGNNTTNG 180  
GTATCTNTGG GTTGGGGGGA CGGTCCAGGA ACCAATACCC CATGGATAACC AAGGGACAAC 240  
TGTACTTATT TNCCMTTATT GTCAATTGCAA GCTTCTTATG GAAACTTTAT AGGGAATGAN 300  
AATATACATG TAAAGGANGA TAAACATTA GATACTAGAT GGTTTGTGTC ATGCTAGAAC 360  
TGTTAGTATT GTTGATTCAA TTACTTTGGT TTCATGAAAA ANTAAACGGT AANTATCTT 420  
AAA 423

SEQ ID NO:3119

LENGTH:421

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03685

SEQUENCE DESCRIPTION:

GATCGAGACC ATCCTGGCCA ACATGGTGAA AACTCATCTT TACTAAAATA CAAAAAATTA 60  
GCCACGCNTG GTGGCGCACG TTGTGGTCCC AGCTACTCGG GAGGCTGAGG CAGTGGAGTC 120  
ACTTGAACCC GGGAGGCAGA GTTGCAGTG AGCCGAGATT GCACCACTGT ACTCCAGCCT 180  
GGCAGACAGAG CAAGATTCTN TNTGCCCCC CACCAAAAAA AAAGANTGAA ACACTGATAT 240  
TTGCTACAAAC ATGGNTATAC CTCCAAAGCA TCCTGTTAAG TGAAAACAGG GAGACACAGT 300  
CACGTACTAT ATGATTGCNC TTACGTAAA TATCCACANN GACGNNTCCA TGGNGACCAG 360  
GCAGATTGCC GNTTGGCAGA GGCCAAGGGT TAGGGAAAAA TTGGTGAGGG ACCCTGCGTG 420  
N 421

SEQ ID NO:3120

LENGTH:410

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03686

SEQUENCE DESCRIPTION:

GATCTATGAC TTCTCAAAGC CGGGTCATGA ATGTCATAA AATGCTAGGC ATTCCATTT 60  
CCAATATTT NATGGTTGGA AATAATGCTT CANATTGGA ACTGGACCCC ATGAAGGATA 120  
TTCTCATCT CTCTGCACTG AGGCAGATGC TGCAGGCTGC AGATGATTT TTAGAAGATT 180  
TGCCTCTNGA GGAAACTGGT GCAATTGAGA GAGCGTTACA GCCCTGCATT TGAGATAAGT 240

01066

TGCCTTGATT CTGACATTTG GNCCAGCCTG TACTGGTGTG CCGCAATGAG AGTCAATCTC 300  
 TATTGACAGC CTGNTTCAGA TTTNNCTTN GTNCGTTTN CNTCTGTCC TTGGACCAGT 360  
 CATATCTCAN GTTCAAAGG CCANAACCT GAGGAGCGGT NNGGCTAAGN 410

SEQ ID NO:3121

LENGTH:402

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03688

SEQUENCE DESCRIPTION:

GATCTGAGGA CCCTGTAUTG GTTAUTCCTG TACACGTTCA CAATTTCTNT GTAAATNTAT 60  
 TAATATACTG AGCAGTCCAG GAGCAGCCAT TAGGCAAACA CCACTCCTG CTTCCCTCAT 120  
 GTGACCTATC ACTGAGCTCA CCAGCTGAGG TCAATNACAT TCTTCCCAAC CTGGAGAAC 180  
 GAATTTGGGT CTGCTCAGAG GCATGATGTG AAACATGTCT GGGATAAAAG CTTTGTCTA 240  
 TTGACAGCAA ACCTTTTGT GTTAAGGGGT AGGGGAAGAG CANGTGAAGG ATGCAGATTA 300  
 ATTTCTATTT AGGANTATAC TTTNTATAT NGTTTGAAT TTTGGNCTG TAAAATATT 360  
 CATCCATNTT TTNACCAANA NAATTCCCT GTGGACNGGT TN 402

SEQ ID NO:3122

LENGTH:409

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03689

SEQUENCE DESCRIPTION:

GATCAGTTG ATTCTGTAAT GAGCACAGCA CCTAATATTT TGAGGAGCTC TGTTTGAGG 60  
 ACCAATGCTT AAGGTGGACT TTGTTCTAA ACAATATCCC AATAGATTG TTGACTTGAG 120  
 GTCTGGTTTG GTTTTGTGTT TGTTTGTT TGTTTCAAT AGAATTAAGA 180  
 ATTCTAATGT TGAAAAACTG CACAAATTTT TATGGGACAA AGCCTAGAAA AGAGAAATGT 240  
 AGTTTGAATC ATAATCTAAA TCATCGTATG ATAGANGAGG GAAAGTTTG GTGCCATAAT 300  
 TTCTCCCTTC ACTGGTGTG GGNCTTAAAT CAAGTTGAAA TGTATTCTG TACCACAATT 360  
 TTANGGCTTT CAATAAAAG TTTAAATNG TCTAGGTGAC CATTCCAAA 409

SEQ ID NO:3123

LENGTH:400

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03690

SEQUENCE DESCRIPTION:

GATCAACATC CACAGCGAGA CCTCCGTGCC CGACCATGTC GTCTGGTCCC TGTTCAACAC 60  
 CCTCTTCTTG AACTGGTGCT GTCTGGGCTT CATAGCATTC GCCTACTCCG TGAAGTCTAG 120  
 GGACAGGAAG ATGGTTGGCG ACGTGACCGG GGCCCAGGCC TATGCCTCCA CCGCCAAGTG 180  
 CCTGAACATC TGGGCCCTGA TTCTGGCAT CCTCATGACC ATTGGATTCA TCCTGTTACT 240  
 GGTATTCGGC TCTGTGACAG TCTACCATAT TATGTTACAG ATAATACAGG AAAAACGGGG 300  
 TTACTAGTAG CNGNCCATAG CCTGCAACCT TTTGNACTTC ACTTGTGCAA TGCTTGGCCC 360  
 TGNACGNTGG GGCTGTTGCC CTTGCCCCNT TTGGTCTGN 400

2153480

SEQ ID NO:3124

LENGTH:400

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03691

SEQUENCE DESCRIPTION:

GATCCTTCCT ACTTTGCTTC TNTCCACCCA TGACCTTTT NACTGTGCC ATCAGGACTT 60  
TCCCTGACAG CTGTGACTC TTAGGCTAAG AGATGTGACT ACAGCCTGCC CCTGACTGTG 120  
TTGTCCCAGG GCTGATGNTG TACAGGTACA GGCTGGAGAT TTNACATAG GTTAGATTCT 180  
CATTCACCGG GNNGGTTAGC TTTAAGCACC CTAGAGGACT AGGGTAATCT GACTTCTCAC 240  
TTCCTAAGTT CCCTTCTATA TCCTCAAGGT AGAAATGTCT ATGTTTCTA CTCCAATTCA 300  
TAAATCTATT CATAAGTCTT TTGGTACAAG TTTACCATGN TAAAAAGGAA ATGTGATTT 360  
GGTCTTCCCC NTCTTTGCA CTTTTGGAA ATANAGGGTN 400

SEQ ID NO:3125

LENGTH:397

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03693

SEQUENCE DESCRIPTION:

GATCCTNAAT TTNAAAATTT NACACCATCA TAAATNAACA AAGGTAGGAA GGAGTTGGC 60  
TTCAATAGCT TACAGTAAAA GGAGTAAAGG AGTCAGCCT CAAAACGATA TTGTTGACCT 120  
GTNATGTAT GAAAATAAT CCAGTGTITA TACTTAACGG ATGCCATCCC TTATNATTIA 180  
CTATTTCTT AGTCTAACTA ACAATCTTT ATTAAAATAA GCAATGATAT TTGACATGGG 240  
CCTAAGAAAT ATATAGTTAG CAAACAATAT TGTCAGTTAG AGGGATTCT TTTCTAAATT 300  
AAGTACAGAT TTCTTCACCA AACTCCAGGN TAACAGAAAAN GGGGCCATAA AATTTGNCC 360  
ATAGTTCTG GGTTAAATAA NTGGTAATT TAAANTN 397

SEQ ID NO:3126

LENGTH:392

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03694

SEQUENCE DESCRIPTION:

GATCAAGTAA CATGTTGCAT GTGGCTTACT CTGGATATAT CTAAGCCNT CTGCACATCT 60  
AAACTTAGAT GGAGTTGGTC AAATNAGGGA ACATCTGGNT TATGCCTTT TNAAAGTAGT 120  
TTTNTTCTAGG AACTGTCAGC ATGTNGTNGT TGAAGTGTGG AGTTGTAAT NTGCGTGGAC 180  
TATGGACAGT CAACAATATG TACTTAAAG TTGCACTATT GCAAAACGGG TGTATTATCC 240  
AGGTACTCGT ACACTATTT TTNGTACTGC TGGTCCGTGA CCAGAAACAT TTNCTTNAT 300  
NGTNACTNGC TTTNAAACT TTGTTAGCC ACTTAAATC TGCTTATGGC ACAATTNGCC 360  
TCAAANTCCC ATTCCCANGT NGGTAATATT GN 392

SEQ ID NO:3127

LENGTH:391

01068

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03695

SEQUENCE DESCRIPTION:

GATCTAAGGA TGACTGGAC ACACCTCCCTG GCACTGAAGA GTCTGAACAC TGGCCTGTNA 60  
TTGGTCCATT CCAGGACCTT CATTGCATA AGGTATCAA CCACATCAGC CTCTGATTGG 120  
CCATGGGCCA GACCTGCACT CTGGCCAATN ATTGGTTCAT TCCAGGACAT TCATTTGCAT 180  
AAGGNGTCAA ACCACAGCAG TCTTGGATTG GCTGTGAGCC AATTCACCTC AGTNTCTAA 240  
TGGCTGTGAG TCAGTCTTC ATTACATAG GGTGTAAACCA TCAGGAANCC TCTACAGGGT 300  
ACTTAAGCCC CAGGATGATT TTGGCTTACC CGGGNGTTTC TTGNGGCCNC TTTGGTNTTG 360  
GCCNAGTNC NCACCTTGT GGGAAATTGGT N 391

SEQ ID NO:3128

LENGTH:389

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03696

SEQUENCE DESCRIPTION:

GATCTCGGCT CACTGCAACC TCCACCTCCC GGGTTCAAGC GATTCTCCTN CCTCAGCCTC 60  
CTGAGTATCT GGGATTACAG GCGTGCACCA CCATGCCTGG CTAAGTTTG TGTTTTTTT 120  
AGTAGAGATG GGTTTCACC ATATTGGTCA GGCTGGTCTC GAACCTCTGA CCTTGATA 180  
CACCTGGCCT CAGCCTCCCA AAGGGNNNGGT GCCACCGCGC CTGGCCCATT TNTCTTTT 240  
TTGACCCATA CTTAATGTTG CAGAAACTAT TCTTGTATA ACATTATCTC TCATGTACAG 300  
TAATTATATG TAAATTAAATT GAAGCAAATN TGGGAAACTT TACAATAGAA ATAAAGNTAG 360  
GCAGCCAGCG TNTGTTCCA NTTNTNAAA 389

SEQ ID NO:3129

LENGTH:380

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03697

SEQUENCE DESCRIPTION:

GATCTCGGCT CACTGCAACC TCCACCTCCC GGGTTCAAGC ATTTCTCCTG TCTCGGCCTC 60  
CCGAGTAGCT GGGATTACAG GCGTGAGCAC CATGCCAGC CAGAAGTACT ATNATTCTT 120  
ATAACTACAT ATGAATCTAA AATTATCACA AAAGGAAACT TCTTTAAGA AAAAGAAAAG 180  
AATCAGAACAA TAAATATACA GCATGGCAA ACTACATCTA AAACAAGTAT TATAGGTCTC 240  
ATGGTGGAAA ANTTGGACCC ACAAGAAAAG TTGTTAATTA TCTCTGATAT TCTGAACCAT 300  
TGNTATCTGC AAAATGATTA CTAGGTATGT GCAATGANGG CTATTGATGT TACCCGTAT 360  
ATCTGCACAC TGTGTTCCAN 380

SEQ ID NO:3130

LENGTH:352

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03698

01069

2153480

SEQUENCE DESCRIPTION:

GATCTGCTAG TGCTGTAATA TTGTAATAC TGGACTCAGG AACTTTGTT AGGAAAAAAT 60  
TGAAAGAACT TAAGTCTCGA ATGTAATTGG AATCTTCACC TCAGAGTGGA GTNNNNNCTG 120  
CTATAGCCTA AGCGGCTGTT TACTGCTTT CATTAGCAGT TGCTCACATG TCTTGGGTG 180  
GGGGNGNGAN GANGAATTGG CCATCTTAAA AAGCGGGTAA AAAACCTGGG TTAGGGTGTG 240  
TGTCACCTT CAAAATGTTC TATTAACAA CTGGGTCTG TGCACTGTT GTAGGAAGTT 300  
TTTCTACCA TAAGTACAC CAATAATGT TTGTTATTTA CACTAGTCTA AA 352

SEQ ID NO:3131

LENGTH:375

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03699

SEQUENCE DESCRIPTION:

GATCGTGGGT TGCCGAGAGG ACCTGAGCGC TGCGGCTCTG CTGAATGGAN CCGGGTCCCT 60  
CAGGCCGTGG ACGCCCTCGG AAGGGGGGTG ACTGTGGCTT GTNTCTGGAC AGGAATGTGT 120  
CATTCCAC ATCTTCTAGA GGGCTGCCAG CTGGGAAGAC AGTTATNAGG GCAAGCTGTG 180  
CTCTGAGTT CGGGTCTGC TCCTACAAAG AACGTGCGGT GCTGCGGCN AGGGCCCCGG 240  
CACGGACAAG GGCCACTGCA GAGTGTGTTT CTNCTCGTNA GCTGCCCTGG GCANGGAATG 300  
GGCTGGNTNA TGCAAGTGGGA TGCACATCTN ATTCTGTCTA GAATGTCCAG TAAAAAATCT 360  
GAAATTGGTT GCAAA 375

SEQ ID NO:3132

LENGTH:369

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03701

SEQUENCE DESCRIPTION:

GATCCAACCC AAGGGCAAGG GCATCCTGGG AAATACCATC AAGTGGAACT TCACCAAGTN 60  
CCTCATNGAC AAGAACGGCT GCGTGGTCAA GCGCTACGGA CCCATGGAGG AGCCCCTGGT 120  
GATAGAGAAG NACCTGCCCC ACTATTCTA GCTCCACAAG TGTGTGGNCC CGCCCGAGCC 180  
CCTGCCACG CCCTGGAGC CTTCCACCGG CACTCATNAC GGCCTGCCCTG CAAACCTGCT 240  
GGTGGGGCAG ACCCGAAAAT CCAGCGTGCA CCCCCGCCGA GGAAGGTCCC ATGGCCTGCT 300  
GGGNTTGGCT CGGCGCNCCC ACCCCTGGCT ACCTTGTGGG AATAAACAGA CAAATTAGCC 360  
TGCTGGAAA 369

SEQ ID NO:3133

LENGTH:367

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03702

SEQUENCE DESCRIPTION:

GATCTGGGA AAATTGCGGA GTGTACATT ACAAAAGATGC GTTCAAATAG TGCTCTAAGA 60  
GTTTGTCTA GTGGCTCACT TCGGCTAAAA TGCAGAAATG NATGCTGTCA GCGTTGGTAT 120  
TTCACATTCA ATGGAGCTGA ATGTTCAAGGA CCTCTTCCCA TTGAAGCTAT AATTATTTG 180

01070

2153480

GACCAAGGAA GCCCTGAAAT GAATTCAACA ATTAATATTG ATCGCACCTC TTCTGTGGAA 240  
GGACTTTGTG AAGGAATTGG TGCTGGATTA GTGGATGTTG CTATCTGGGT TGGTACTTGT 300  
TCAGATTACC CAAAAGGAGA TGCTTCACT GGATGGAATT CAGTTCTCG CATCATTATT 360  
TGAAGAN 367

SEQ ID NO:3134

LENGTH:366

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03703

SEQUENCE DESCRIPTION:

GATCAAGAAA TGCATTGACA TTCTAATTGA GAAAGAATAT TTGGAGCGAG TGGATGGTGA 60  
AAAGGACACC TACAGTTACT TGGCTTAACC CTTCTGGAAG GGTCTGACTG TGTGACCCGC 120  
AGCAAATAGT TCATGTTGGA AAGAATGAAA ACAACTCAAG TTCATAGCAG CCAGCCTGCC 180  
GCCATTGGAC CTCCCTTTA AAAACTGAGA CCAAGACTCC CATCAGCTGG TCTCGGGTTT 240  
ACATCGGAAC TGCTCAGGAT TGATACATT NAAGTCTGTA AATACGGACA CCAACGCCAT 300  
TTACCTTAAT TTNANGAAC A GCAGGGNCTG TCCNTCCGGT GCCGAGGGC TTGCATTGCT 360  
TACCGN 366

SEQ ID NO:3135

LENGTH:364

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03704

SEQUENCE DESCRIPTION:

GATCCCTGAT TAAGCTGATG ACTAGACCTA CAATTAATT TCCCTGCAGTA TATGAAGTAT 60  
TGTACCAAGAG TATTAAGA TATGTAATAT TTNATTGATA AATCTATCCT TTAAAAGGAA 120  
TACGTTTAG GATGTCATCA TTTTGATGTT AATCATGTAATGTTGATAA TATGCTGTTT 180  
ATTATACATT TAGTGTTC AGAGATTAC TTAATTGCCT TTTGCCAC GTATATTATG 240  
TAGTCTATT GCAACTGTT CTTAAAAANT GNCATTAAG GACTAGTTA TGTNGGGAAC 300  
CATTAGTGGN TGTTATTNGN CTCCCCCCT NTNTTTTGG GGTGTTAGCG CACCTGCTTT 360  
GCTN 364

SEQ ID NO:3136

LENGTH:363

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03705

SEQUENCE DESCRIPTION:

GATCCTGACC AGCAAGCCCC CCCCTCAGCCC CCCTTCCAAG TGACTCCGT NCTTGAGTGT 60  
GTCTGCGTGT TTACACCCGT CCCTCTGCTG GCGGCCCG TGCGAGCGGC ACCCCCTGCC 120  
TGCCCTCCAC AGAATTGGGT TCCAAGGGCT GTTCCAGACA ACTGCCAACG TCACTGAGGG 180  
CCCTGCCCA GCGGNCTGG CCCCAGGCTC TATTAACCTA AAATGTAGCT CCCTAGCGNT 240  
AACCTAGGAA CGGGCGTTGN CTGCTTGGGG GGTACGCC TCATGNCCTT GTTCCAGGG 300  
CCGGGGGCCT TNAAGGGTT NGAACAATTG NTTGGCTTT TTTCANANTG TTTAATNGGA 360

01071

ATN

363

SEQ ID NO:3137

LENGTH:359

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03707

## SEQUENCE DESCRIPTION:

GATCTGGTGG TCAGCCCTAG GATAAAAAGC CAGGGCTGGA GAACAAGAAA GGGCCAGGAG 60  
 ATGGAATTCC TTCAGGCCGG CACCCACACC CTAGGACATG TAAGCCCTCA TGTCCAAGGG 120  
 AGCCTCATGC AGATACTAGG AAATCAGTC TGGAAATTAA AAANTAAAAG GCATGAGACT 180  
 AAGGCTATCT GCTTCCTNTA TGCCCTGACT GGAGAGGGGA GGGTGGAGAG GCANGGCCA 240  
 CAGTGGGCAT CCCNGCTNGG TCTTNGGATG NCTGCNGTGN GGTGAATTCC CGGGAECTNG 300  
 TTTTGGCACACANGNTNNTT TTGGCACTTT GTTTTTTTG GTATTAAAG GTTTGCTN 359

SEQ ID NO:3138

LENGTH:358

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03708

## SEQUENCE DESCRIPTION:

GATCAGGGGA TAGTGAAGTT TACCAACTGG GTGATGTCAG TCAAAAGACA ACATGGCACA 60  
 GAATATCAGT ATTCCGGCCA GGCCCTCAGAG ACGTGGCATA TCAATATGTG AAAAAGGGGT 120  
 CTCGAATTAA TTGGAAGGG AAAATAGACT ATGGTGAATA CATGGATAAA AATAATGTGA 180  
 GGCGACAAGC AACACAACAT ATAGCTGATA ATATTATATT TCTGAGTGAC CAGACGNAAG 240  
 AGAAGGAGTA GAAAGGATGA TTCTCTTTG GCCATCATTT GGTACAGTCT CATTCCAAG 300  
 TCATGTATAA TCTTATGGC TTCCAGGGAC ANGGNTTTAA AATACTCTT TACGTAAA 358

SEQ ID NO:3139

LENGTH:356

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03709

## SEQUENCE DESCRIPTION:

GATCTCAGTC TCTCTGTCTC TCTTCTCTC CTTTCCTTT TGTTGTATCA AATATTTNAT 60  
 TGACAAAGTA AGGGCCTTGA TTAGGACCAA ATTCTCGTGT GTTGCTATGG TCTTTATTTA 120  
 GGACAACAAT TAACAATGCA GTGCCATT CTTGTCACTC TACACATATG ACTATAACGGG 180  
 ACATATGTAA TATATAAATA TATATATAAA NCATTCCCCT CTGTCCCCCTT GGCTTCGGAT 240  
 GGAGGCCTTT CTGTTGAGCT GAAATGCACC TGCACTGGG TGCTGCCAGC AGCTTGCAGG 300  
 CCCCAGCCCT GTTCCANTCA ATGCAGTTGN CAATAANTGG NATGAGTATC GTCAAA 356

SEQ ID NO:3140

LENGTH:354

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03710

## SEQUENCE DESCRIPTION:

GATCTTCAGC ATGTGCGGCC TCATGCTTAA GCTGAAGTGG TGTGTTGGG TCGCTGTCTA 60  
 CTGCTCTTC ATCAGCTTG CCAACTCTCG GAGCTCGGAG GACACGAAGC AAATAATGAG 120  
 TAGCTTCATG CTGTCATCT CTGCCGTGGT GATGTCCTAT CTGCAGAACATC CTCAGCCCAT 180  
 GACGCCCCA TGGTGATACC AGCCTAGAAG GGTACACATT TGGACCCGTG CTATCCACTA 240  
 GCCCTGGGCT TTGGCTGCTA AACCTGCTGC CTTCAGCTGC CATCCTGGAC TTCCCTGAAT 300  
 NAGGCCGTCT CGGTGCCCCC AGCTGGATA GAGGGAACCT GGGCCCTTT NCTN 354

SEQ ID NO:3141

LENGTH:352

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03711

## SEQUENCE DESCRIPTION:

GATCTTGATG AGGGCCAAT TTCCCTCTTC CACAAGGGAT TAATCTTAGA ACTATAGCCA 60  
 ATTTATTATA AGTACTATTT AGCTACTCTG TGCTCCACAC ATCACGGAGT AATATCTTCA 120  
 AACTATGAGG TTTAGTAACA CTTGACTGCT GAGGTTTATT TCCTCAGCTC TGATGTTCC 180  
 TGGGTGAAGA TGTAAGTNAT TAAATTAAC CAAATTTAA AGCTAACACT TCATTCCATC 240  
 TAGACCAGGT AGCTCGTCAT TTGTACGTCT GATAGGTGCT TCAACATCTC AGAATTGGCT 300  
 TTATTTTCA TGCATTGCAT ATTGTACTCN TTTGTAATAT TGGGNATGTA AN 352

SEQ ID NO:3142

LENGTH:349

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03712

## SEQUENCE DESCRIPTION:

GATCTGACCA CTGTTCTCCA GCAGGCCCTCT GCTGCAGCTT TTNCTCTCAG TGTTCTGGCC 60  
 CTCTCCTCTC TTGAAAGTTC TCTGCTTACT TTGGTTTCC CTCTGCTGT AAAACATTGA 120  
 GTCCCCCTCC TGCCTGGTT AATTGACTCA CACCAAGCTGT GCGATGCCCG CTTTTACAAT 180  
 TAAAGGAAAA CTGTTTGTT CAGTGTCAACC TTGTCAGCAA CACTGTGTCC CTTCGCCCA 240  
 CCGTTCTCTC CTGCTGCATT TGGACATGAG CCAAATTGAA ACCCAATCAA ATATAACGTG 300  
 TCTGACACTG ATTTGTNTT TACTCAANTA AANGTATAGA CTACAGAAA 349

SEQ ID NO:3143

LENGTH:348

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03713

## SEQUENCE DESCRIPTION:

GATCTGTTCC AGCTGCAGGT GAACACCCCTA CGACGTTATA AACGACACTA ACAAGTTGCA 60  
 GACCAGACCA GGCTTCATA AGGCCAGTT AGCAGAACT GTGAGTCGAC ACTTCAGGAA 120  
 CATACTGTG AATGAAAAAG AGACCCCTGCTACTTCATC TACATGGTGA AGAGTAACAA 180  
 GAGTAGACTG GACCAGAAAT CGGAGGGNGG CAAGCAGCTT NAGTGAGGAT GAAGCACATC 240

2153480

TTAAAGGAAT GAAGTGTAAA TGCTTGATGC ACAGGTNGAT ATCTACTACA TTTAAGCCCA 300  
TAAAGACTGT TTAAATATTA TTGTAAATAA AAAAGTTGTG ATGATTGN 348

SEQ ID NO:3144

LENGTH:348

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03714

SEQUENCE DESCRIPTION:

GATCCAGATG CAGAGGCCAG GATGTGGGCC CAGCCCTGTG CCAGGAGGCT NGCTGGAATA 60  
AAGGGATGGG CAGGCTGGCA TGGGGGCAGC CGCTGCCCT GCCTNNNTGT TGCTGTGTAT 120  
TCCTGCCGGC CAGGGGCCAC TGCCAGGACC ACGCCTCCCT TTNATATCC CGATTCTTAA 180  
GTTCTGCTAT TGTGGTATTG TGGTGGAGAA AAAAGAACCG CGTGGCTGTT TTTNAACTGC 240  
CTGGAACCTA AGACCTTGAA TTCTTTCCC CCCCAAGGGG AAAATCTATA TGGAAANCAT 300  
TTATTTAAA ATACAGGATG AAGTGAATTA AAAGATTTA AATGCAA 348

SEQ ID NO:3145

LENGTH:379

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03715

SEQUENCE DESCRIPTION:

GATCACACCT GAGCTTATGC TAAAAGGTGG GATGACTCAG AGCTGGGCT GGTCAACCAGA 60  
CAGACTGACC ATGTGATTAG AGTTTGAGG CTTTGAGTCA GCCTGACCTA TGGGGCGGGG 120  
GAUTGGAGGC TGAGTTTAAT CATCTGGCCA GTGCTTAAT CAGTACATCA TGAAACCCCTA 180  
ATAAAAACTC TGGACACTAA AGCTCAGCAT AGCTTCTGG GTGGTGAAGC TGTGGCTATG 240  
CCGGCAGGGC AGTGTGCCCT AATTCCACGA AGAGGGGGCA TGGGAGCACT GTGCTCAAGA 300  
CCCTTCCAGA CCTTCCCTG TGTCTCCTT GGCTTGTGGA GCTGATTGT ATCCTTATA 360  
ATAAACCTAA TCATAAGGN 379

SEQ ID NO:3146

LENGTH:371

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03716

SEQUENCE DESCRIPTION:

GATCTGACCT GTGACAAGTC TGTACTATCC ACTATGTAAA TGGCTCACAA GTCAATTGCA 60  
AACAAACTGA ATGTACAAAT CTTAGTGCTG GTGCTGAAAT CTCTTCAGAA TAGTNATCAT 120  
GATTAAAAAG TTGTTTTAA AATTGCAAG CATCAAGTGT CAATCAAAAC TGAAGATGAA 180  
ACACTAATGA ATGTTGAATT CTCATGCTT TAGGTGTACT TCCTTTTAG AATTTCACT 240  
TTTCTGCTAT TTTTACCGTA ACTATTCGT TTAAANTGG TTTCATTAN GTTTCCCTACA 300  
TGCTAACTTC GTTTGTGCGN TTGANTAAAN TTGCCGGTAT ATATNTGGTG GCCTTGTGTTG 360  
TGACACTTTG N 371

SEQ ID NO:3147

01074

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LENGTH:346

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03717

SEQUENCE DESCRIPTION:

GATCACAGGC AAACCCATCA AGCTGACTCA GGTGGAACAC GAAGCTGGCA NNTAAGTGG 60  
ACATGGATGG GGCAGGAACC ACCCCCAGCC CAGGGCTGCA GCCTNNCCA CCTNACCTTC 120  
CCGCTGGACT ATNACCTAA CCAGCCTTN ATCTTCGTAC TGAGGGACAC AGACACAGGG 180  
GCCCTTCTTT TCATTGGCAA GATTCTGGAC CCCAGGGCC CCTAATATCC CAGTTAATA 240  
TTCCAATACC CTAGAAGAAA ACCCGAGGGA CAGCAGATTAC CACAGGACAC GAAGGCTTGC 300  
CCCTGTAAGG TTCAATGCA TACANTAAAA GAGCTTTATC CCTAAA 346

SEQ ID NO:3148

LENGTH:344

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03718

SEQUENCE DESCRIPTION:

GATCTNCTGC CGAGTGAATG GGGAAAGTGNT CCAGAGCGGC AACACCAAAT AGATGGTATT 60  
CAAGACAGAG GACCTGTAG CCTGGGTCTC CCAGTTTNNT ACCTTNACC CAGGGGATGT 120  
NATCCTAATC GGGACCCCCC CAGGTGTCGG TGTATTCAAGG AAACCTCCTG TTTTTNTCAA 180  
GAAGGGGGAT GAAGTCCAGT GTGAGATTGA NGAACTAGGT GTNATCATCA ACAAGGTGGT 240  
GTGATGGCTC CTGCACAGGC CCTGCACATA GGTTGAGGGC ATCTGCTCCC ACTNAGCCTA 300  
GCCCAAGGGAA AGGCCANTG ACAGGNTGTG GACAGGTTGC CAGN 344

SEQ ID NO:3149

LENGTH:341

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03719

SEQUENCE DESCRIPTION:

GATCTTGAA GTCTATTAA ATATTCATTC CATTACATCT AGACTCACCN AGAACTACAT 60  
GTTATGATGT TAAGTGAAG TTGAAACATG ATGTTTGCA TTAAATTAA GATATGCAAA 120  
TTTATGTAGA GAAAATAAT GTTATATACC CTATAATCTT TCACCTAATT AGTATTAAAT 180  
TATATGGATT TGNNTTATAT TATAAAAGAT GTTTGATTG TGTCTNTNGA TATTGNCAAA 240  
ATTGTTGGA TATNCITATG TTCTCAAGTC TGTATCTGCC TCCCCTGCC TATNTCTNAT 300  
GTTTTGCCAC AGTTAACCCA TTGTGCTTCT TTGTAATCAA N 341

SEQ ID NO:3150

LENGTH:339

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03720

SEQUENCE DESCRIPTION:

GATCTNATCA GTCCTAACCGG GGTCAATGGGG CAACACGGTT ACCGGGGAGA GCACGGGGTA 60

01075

GCCGGAGAAG GGCCTCTGGA GCAGGTCTGG AGGGGCCATG GGGCAGTCCT GGGTGTGGGG 120  
 ACACAGTCGG GTTGACCCAG GGCTGTCTCC CTCCANAGCC TCCCTCCGGA CAATAAGTCC 180  
 CCCCTTTGT NTCCCACCC NAGATTGGGC ATGGGGTGC GTGTGGGGG CATGTNCTGC 240  
 CTGTTGTNAT GGGTTTTT TGCGGGGGGG NTTGCTTTT TNTGGGTCT TTGAGCTCCA 300  
 AAAAATAAAC ACTTCCTTN AGGGAGAGCA CACCTTAAA 339

SEQ ID NO:3151

LENGTH:337

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03721

SEQUENCE DESCRIPTION:

GATCCTCTCC CTGGGATAAG CACTCCCAGC CCCGTTTATC AGAAACACAG GCAAGGAAAT 60  
 TGGAACTGCC ACCCAGGCCA GCATGATGGC TCAATTGGTT GGTTNCGTG TNAGTTGTCT 120  
 CTTNGTTTG TTAAGNNNTT TAATAAAGTA CGTTTGAT AATTGCCCTT AAATGGTTTG 180  
 TAATATTGT AACGGTTTA GCAGCCTATA ACTTTCAGC TGGTGCTTT ACTTAGGGNA 240  
 AAAAACAAATT TGTAATACA GNACATTTGT TAAAAGGCAT AACCNAGAA CATACTTCC 300  
 TGTTTGTGG ATTTGGTTTC CTNTATATTC AAAGTAN 337

SEQ ID NO:3152

LENGTH:336

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03722

SEQUENCE DESCRIPTION:

GATCAGAGGC AGACAATGAC GAGTGAAGAT GGTTGTAAAG CCCTCTTCAT TCCTGGAGGA 60  
 GCCTGCATCT AATCTNTNAG GCCCTCTTTC TCTGTGGGTG TCATGAACAG CAGTGGGGAC 120  
 CATTGAGNAC TTGAATGGCC TGTGTTGTNTA TGGGCTTGCA AAGGACAAGC AGAGTTCA 180  
 GAGCTCAGGA TAGAAACATC AGAGCCTCCT CCACGGGCTT CAGTGNACT CCGATGAACT 240  
 GTACCTGAGG GAATTTTTT NTTAATCAAC CCCTTGTTG GATGAATACA GGACCACAAA 300  
 ANTTNGTNTA CGTTGAAAA AAAANAANNT NTNNT 336

SEQ ID NO:3153

LENGTH:334

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03723

SEQUENCE DESCRIPTION:

GATCTGCATT CCGACTGCCT ATNAACGGGT GTGGGGGCCG GGGGCTGGAN TTGCTGAAGT 60  
 NTTCAACTTG CACTCGGAGC TCCCTTNATA CCTCAAAGCT GGCTGTNAGG TGGCAGCTCA 120  
 CACCCAGACT CACTGGCCAC ACCTCAGCAG GGGGGGAGTC GAGTGTCACT NTCTTCTGT 180  
 GAAGGCTTT TTTTCCCTT GGCTTGGAA TTTTCCCAT TTTAATGAAG GGGTTTTAAA 240  
 TTGTTTCATT TTGTTGTGCTG TGCTTCAAAG CCTTAACGT CAAATCTTGC ATTATCTNGT 300  
 TTGTACAGAA ATATACTGGC CTAGCAGNGG CAAA 334

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SEQ ID NO:3154

LENGTH:330

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03724

SEQUENCE DESCRIPTION:

GATCAAATT TGTGTA CAGGGCTTC TTTCTTTT CAAGGGTCA 60  
TTTGGAAAC TACATTTAA ACTTGGAAT CAAATTGTT CTTATTTGGG AGGATAATGT 120  
ATATACATTG GTATTATGTT AAATAATAAA ATTGTNCTAA TTTGGTGCCA TTTCTGAAT 180  
CACAACTGTA TTTTGNNATC TCANGCTATT TTCATATGTN ATGTGTCAAT GTATCATCTC 240  
TCAGAAAGGT TTACANTCC AACATTATA TGTCATCTGT GTAACGTAAAT TTNACTTATC 300  
TNTNTAACAC CAGNAACATT AATTGAGAAA 330

SEQ ID NO:3155

LENGTH:330

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03725

SEQUENCE DESCRIPTION:

GATCTCGCA AGCCAGCTTC TTCTGCATCT NAGGGGCTGC TGGCGCCCAN AGGAGGCAGA 60  
CAGATGTCN NTAGCTGAGT TTCTAACCGC ATGATGAGAC TCAGACCTTC CGCTGCACTA 120  
GAAAATCTGC AACAGTGTCC CTGAGTCACT TCTCCTTAGT GGGCAGACTC GTGTTAGATT 180  
TGTGGAAACC AGCTCTCTGA TTACTCCTT TTGGAAAACC CATGGAATTT CATGTATAAG 240  
GCTTCATTT GTATTNAAG GTTTTCTGT TTGTTTGAG TATATACATG GTGCTCAATA 300  
GCAACATCTT AGCAGATGAA GCAGTTATN 330

SEQ ID NO:3156

LENGTH:329

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03726

SEQUENCE DESCRIPTION:

GATCTACTGC AAATCTGCT ACAGAAAGAA GATATGGCCA AAAGGCTACG GTTATNGCCA 60  
GGGCGCTGNC ACGCTTAACA TGGACCGTGG CGAGAGGCTG GGCATCAAAC CAGAGAGTGT 120  
TCAGCCTNNAA CAGGCCCTACA ACAAACTCAA ACACCTCTAA ATTTNCTCAG AAATATGGAG 180  
GTGCNGNGAA GTGTTCCAGG NGTGGGGATT CTGTATATNC TGCCGAGANG ATAATTGGAG 240  
CTGGAAAGCC CTGGCACAAA ANCTGTTCC GATGTGCAAA GTGTGGGAAG AGTCTTGANT 300  
CAACANCTCT GACTGNAAAN AGAAGGTGN 329

SEQ ID NO:3157

LENGTH:329

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03727

SEQUENCE DESCRIPTION:

01077

GATCGGGCGC ACGGNCCGCT TTGGCAAGAG GGGCCTGGCA GTGAACATNN TGGACAGCAA 60  
 GCACAGCATG ANCATTCTGA ACAGAATCCA GGAGCATTAAATAAGAAGA TAGAAAGATT 120  
 GGACACAGAT GATTTGGACG AGATTGAGAA ATAGCCAAC TGAGAACGTC CACCAGCCAC 180  
 TGATGCCAGC CCTGGCACTG CCCCTGCACA GGAGACAAGT GCGTTCAGGG CACAGGCCCC 240  
 GACATCACCC CAAGGNCACG GGCACAAGTA GAGAGANACT ACCTACCTCA NTTCANATTA 300  
 TGTTGGCCT TGACAAAATT GTATGCAAN 329

SEQ ID NO:3158

LENGTH:327

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03728

SEQUENCE DESCRIPTION:

GATCAAATTT ACTNGAACAA TTGTTAATTT ATCCATTGTG CTTAGCTTG TGACACAGCC 60  
 AAAAGTTACC TATTTAATCT TTTCAATAAA AATTGTTNTT TGAAATCCAG AAATNATTAA 120  
 AAAAGAGGTC AGGTTTTAA CTATTTATTG AAGTATGTGG ATGTACAGTA TTTCAATAGA 180  
 TATGAATATG AATAAATGGT ATGCCCTTAAG ATTCTTGAA TATGTATTAA CTTTAAAGAC 240  
 TGGAAAAGC TCTTCCTGTC TTTAGTAAA NCATCCATAT TTCATAACCT TATGTAAAAT 300  
 ATGTNGTNCC TGTTCCAAT AGGTGAN 327

SEQ ID NO:3159

LENGTH:324

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03729

SEQUENCE DESCRIPTION:

GATCTGAATT TGGACCATTT CACTAAAGAG AACATGAGTT TGCTCAGCCC TTTCCCTCACA 60  
 AGAGGGAGGG CCCCGTTCC CCAGACTTCT CCACCGCGCTG GCTCCATAAA GGCCAGCTTT 120  
 GGCCAGGGCTG CCACAGGGGC CTNAGGAGCT CACTCTGGGC CTACCTGGTT TCAGTTAGAG 180  
 GGTCTCTCTG TTATTTTCC ATTAAAAAG TATGTCTCA GAAAATGTA NTGGAAGGAT 240  
 GGGTGGCAGG AACTTGATA GTTCAGCTTC CAACACTTTG GAACAGATTA AAAAGGGAAT 300  
 CTTTAAATA AAAACGTATA NAAA 324

SEQ ID NO:3160

LENGTH:322

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03730

SEQUENCE DESCRIPTION:

GATCTTGTT TTAATTAACT TATTACTCTA TTAATATAAC CTTGGAATTCTATTCTAATN 60  
 ATGTTGTTCT GGCTGTTGT AGTATCAGTT CGCCCCCTCTT GTTAGGGAGA TATGTAACAA 120  
 TCTGTCTATT AATTGAACAG TCTTTTCAC ATAACAGTAA TAGAAAAAT CCTACCTACT 180  
 CAGAACATC TNCTTAGGTT GTCTCCTAAA TCTGAACAAT ACAGTTGTTT TATAAANTNN 240  
 CATTNGTCT CTTGAGATTN AATCAATTAG AACTCTTAG GGAGAAAATA AATANTAGAN 300  
 GAAANTATAT GCCTCANATT GN 322

SEQ ID NO:3161

LENGTH:320

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03731

## SEQUENCE DESCRIPTION:

GATCTGACTT TTTCCCTCT CAAAAGAAC ATACTTGGGA TTACAGGTAC ATTTNATGTT 60  
ATATNATGGA TAAGTAAAAA NTTTTAAAG GAGATTTAT ACCTTTCAC ATTAAAAAAG 120  
GTATTTATAT TATNACTTG TAGTGATTGT CTTAAGAAAA AATATAGCCC AAATGTATAG 180  
TAAAATCAGC AGCTCAAGAA GAATTCTGC TTCTNTTTGT AGTTGATGCT TTGTTTTNC 240  
CTGCAGTCAG AAATTCCCTG TATTGTCAA ATGTATAATC AGCTTGTATT GTTTTAAAT 300  
TAAAANAAAA TTTGANTAAA 320

SEQ ID NO:3162

LENGTH:320

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03732

## SEQUENCE DESCRIPTION:

GATCTGAAAA NAAACCTAA TACGCTATA TGGTTGGAGT GTTAAGTGAA CCTNTGATT 60  
TTTNAGGGTT TTTNTACGTG TAGCGTGAA TAGGGGGCAC CCCTTCAAA CTGTACAAG 120  
AAGACGACTG TTTCCATT CCATTTAAC ATTTTAGCC ACTTCATTTC TATTATTGA 180  
ACAGGTCAAA TTGTTGAG TACAGTACAT TAAAAAAACA TCCTTATCGG 240  
TTATTTTTT TTCAGTCGGA GTTGACGTA TAAATNGTT ATGCTTTGG TGTAATCTCT 300  
TAATAAACTG GTTCTTCAAA 320

SEQ ID NO:3163

LENGTH:180

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03733

## SEQUENCE DESCRIPTION:

GATCAGCTAG CTTGATTCTT GTGTAACCTTT TTNAAACTGT GGGTTTCCT AGTAAATTAA 60  
ATTTACAGAA ATNAATGGTA GCATTTAGTA ATCTACAAAG GAAATATCAA AGTNTTTNN 120  
AAGCCTGTNA TATTCACTGT GTGCCACAGG ATTGAAATAA ATGACAATGT AATTATGAAA 180

SEQ ID NO:3164

LENGTH:303

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03734

## SEQUENCE DESCRIPTION:

GATCAGAATT CCGATTGAC GGGCAACCAA TCAATGAAAC AGACACACCT GCACAGTTGG 60  
AAATGGAGGA TGAAGATACA ATTGATGTGT TCCAACAGCA GACGGGAGGT GTCTACTGAA 120

2153480

AAGGGAACCT GCTTCTTTAC TCCAGAACTC TGTTCTTAA AGACCAAGAT TACATTCTCA 180  
ATTAGAAAAC TGCAATTGG TTCCACCACA TCCTGACTAC TACCGTATAAG TTTCTCTAT 240  
TCTTTCATTT CCCCCCTCCCC CATTCTTTA TTGTACATAA AGTAACCTGGT ATATGTGCAC 300  
AAA 303

SEQ ID NO:3165

LENGTH:311

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03736

SEQUENCE DESCRIPTION:

GATCTAGAGC CAGGCTGGTC AAGACAAGAA TTGGCTGGAA TAGGCTGCTC TTCCCCCATT 60  
CCATCATGTG CTGTCCCCAC CCCCTTGGCC ACCTGGGCTG ACTGTGTCTT AATACCTCAA 120  
GTGCAAGTAT ATAGGAGTAA GAAATNAACA ATGCCCTGCCT CCTTATACTC ATGCCCTACAT 180  
TGTATGACAT CTAGTATGAA AGGGAAACAT TAAAGGAAAA CCCTTGTGTT GCTCTAAAAC 240  
CTGAGGACGG TAAACACTGA GAGTAACCTG GTGCTGGTT TGAAGTAAAA CACAAATACT 300  
TCCCTTTAA A 311

SEQ ID NO:3166

LENGTH:309

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03737

SEQUENCE DESCRIPTION:

GATCAAGGGC AATGCCAATG AACATCGGCA TGGATTATAA TTATGCCCTC CTGGAACTCA 60  
AAAAGCCCCA CAAGAGAAAA TTTATGAAGA TTGGGGTGAG CCCTCCTGCT AAGCAGCTGC 120  
CAGGGGGCAG AATTCACTTC TCTGGTTATN ACAATNNCCN NCCAGGCAAT TTGGTGTATC 180  
GCTTCTGTGA CGTCAAAGAC GAGACCTATG ACTTGCTCTA CCAGCAATGC GATGCCAGC 240  
CAGGGGGCAG CGGGTCTGGG GTCTATGTGA GGATGTGGAA GAGACAGCAG CAGAAGTGGG 300  
AGCGAAAAA 309

SEQ ID NO:3167

LENGTH:309

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03738

SEQUENCE DESCRIPTION:

GATCTTGATA TGTTTAACA TTATCATGGC AGGGAAATAT ATAAAGAAGA AAAATATTTT 60  
NACATTAAAC CTTTTCTAAA ANTTGAAAT AGAAAAAATAA TTTGGTTTTT NATCAAGANC 120  
AACACTTATC GTTATGTATT GTGTTAGTTA TATTGCCAGT CTGTTGCAC TGACTCAAAA 180  
AGTTAAATGT TGCCACTGCT GANGATGATT ATGNGCATCG CANACTTGT TTCTGNCCCA 240  
TTTTGGCACT TTTNATATAC TCCNTTAAGA TGTTGAATGT TACAGGTTAN TAAAGTTAAT 300  
ACCTTTAAA 309

SEQ ID NO:3168

01080

LENGTH:306

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03739

## SEQUENCE DESCRIPTION:

GATCCTTAC AGAAAAGTT TTCTGACCTC AATTCTAAAG TAATTGAGT AGGGAGCTGG 60  
 AGGACTTTCT TTCCCTTAT GGTAATTTTG TGAGCTACAA AAGAGCCTTG CAGAAATGGG 120  
 TGAAGGGATT AANCTTTAA AAATAAAATGC TATATATTAG GAAAATAAAA AATATTTAG 180  
 AGCCAAGTTA ACAAGTACTT CAGCAAAACA TGCTAGTTT ATGCAGGGGA TTCTGTATT 240  
 CAAATGGATA CANTCCGACA TATATAAAAG AATCAGATT CTTAACTATTG ACTCTTATT 300  
 NGCAAN

306

SEQ ID NO:3169

LENGTH:306

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03740

## SEQUENCE DESCRIPTION:

GATCATACCC AGAATTCAAT GTTGATATT TTAAGAATGT ATGTTCTAGT GTTTTNAGA 60  
 GTGAGTCTAC CATCTGTATA AAAACACCTT GGGGGCAGGC AGGGGCATTT AAAAATGTAG 120  
 GACCTATCGT CCAGACTCAC AGAGTGGGC TCCAGAACCT CCATTTTAA CAAACTCTCT 180  
 TAAGTAATTC TGATGTGTAC CAAAATCAGT GCCATTGGTG TGTGTGTACG TAACTATATA 240  
 CATATGTGTG TGTGTGTATA TATATAATGT GTCATAACCG TAAACAATAA ACAATATCAA 300  
 GNTAAA

306

SEQ ID NO:3170

LENGTH:306

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03741

## SEQUENCE DESCRIPTION:

GATCTGTAT GTTAAACCC CCTACTTCTA AGGGAACCTC TCTAATCTCT TATCCTCATC 60  
 CCCAAATAGT GTTTCTTCC TCTGGTTCT TATAATNTTG GTATCAATCT CACAGCATT 120  
 AGTGCTTCT GCCTGGGTG ACAGTTACCT GTGTGCATGT GCAATTCTA ATTTCCCACG 180  
 CTAGACTGTG AGCTTCTAA GGCAAGAACATC ATGCCTTGTG GGTTTCTGTA TTCCTCATGG 240  
 TGCCAAACAC AGTGCCTTCT ACATTGCAGG CGCTGAATAA ACATTTTAA AGCAAAAAAA 300  
 TTNAAA

306

SEQ ID NO:3171

LENGTH:305

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03742

## SEQUENCE DESCRIPTION:

GATCTCCAGT GGTCAAAAGA CATTACCT TAATATCAGA CAACATTAT ATTGAGTGA 60

AGAAACAAGT TCTCGGGTGG GGAATCTATG TTTCACTCAG ATTTATATGT TTGGAGGAAA 120  
 AAAGCCTTT TTTGTAAAAT ATTTAAATT ATATANGAAA ATGTTAGAAA AAAATATGGG 180  
 GGAGTGTATT ATAANNCCTG CTTTATTGC CATGGGGCCN GGGGGAGGCC NGGCCTAATA 240  
 CTCCTAAAGT ANGTGTTNGG GNCCNTNTT TCTTCCAATC CACCTGGTGC TGTTCCNTGT 300  
 AANGN 305

SEQ ID NO:3172

LENGTH:303

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03743

SEQUENCE DESCRIPTION:

GATCTCCGGG AGGGACAGAT GGCAATNTC TCCCCTCCA AAGCAGGCC TGCTCCCCGG 60  
 GCAGCCTCCC GCCGAGGGGGC CCAGCCCCA ACCCACAGGC AGGGAGGGC ATCCCTCCCT 120  
 GCGGACCTCA GGGAGCGAAC GTGGATGAAA ACCACAGGGA TTCCGGACGC CAGACCCCAT 180  
 TTNATACTTC ACTTTCTCT ACAGTGTGTG TTTGTTGTTG TTGGTTTNA TTTTNATAC 240  
 TTTGGCCATA CCACAGAGCT AGATTGCCA GGTCTGGGCT GAATAAAACA AGGNTTTCT 300  
 AAA 303

SEQ ID NO:3173

LENGTH:306

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03744

SEQUENCE DESCRIPTION:

GATCACTTT GAGCTCTGAA GCTTGAAATC ATTCACTGGT GGAGATGCC TTCTGGTAAC 60  
 TGAATATTAC CTTCTGTAGG AAAAGGTGGA AAATAAGCAT CTAGAAGGTT GTTGTGAATG 120  
 ACTCTGTGCT GGCAAAAATG CTTGAAACCT CTATATTCTC TTCGTTCATC AGAGGTAAAG 180  
 GTCAAATTT TCAACAAAAG TCTTTAATA ACAAAAGCAT GCAGTTCTCT GTGAAATCTC 240  
 AAATATTGTT GTAATAGTCT GTTCAATCT TAAAANGAAT CAGTAAAAGC AAACAAGGGG 300  
 TTTAAA 306

SEQ ID NO:3174

LENGTH:301

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03745

SEQUENCE DESCRIPTION:

GATCAGCAAA CACGATAGAG GAGACCAGTC AGTACTTCTT GGAGGGGCN GGAGGAGAGA 60  
 GGAAAAGGGA GGGCGAGAAT NACCACACAA CACAGCCNT NGACCATGAG CAGAACGTC 120  
 CGTGGGAACCT CCACTGGGT NGATGGGCTG CCTGCACAGC CCCTGGAGAG GGGGCCAGGC 180  
 ACACCCCTCAG AGGAGCTGCA ACCCGTGGCC TGGCCTGCTA CATGCCCTGC TTCCACGTGG 240  
 NTGCCACGGT GACACANCCA CATTNACCAA TCCCNCCGG GTCTGGGGA CGNAGNCACG 300  
 N 301

SEQ ID NO:3175

LENGTH:299

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03746

## SEQUENCE DESCRIPTION:

GATCAAAGTT GTCATGAATA CTGACTTGGG CGTGGGACCC ATCCGAGATG TGCTGCACCA 60  
 CATCTACAGT GCGCTGTATG TGGAGCTGGT GGTGAAGAAT CCCCTGTGCC CGCTGGGCCA 120  
 AACTGTGCAA AGTGAGCTCT TTGCTCCCCG ACTGGACTCC TATGTTGCT TTCTGCCNN 180  
 NTTCTCCGCC CGGGCTGGCT GAAGCAACCT ACCTCAAGTN TCAGGAGAAT TCATGTCTNC 240  
 CTGGGGCCCT TCCGAACCTT GTGCCAACTA AGGGCCCCCA NTGTAAGCCC CCGTACCTN 299

SEQ ID NO:3176

LENGTH:298

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03747

## SEQUENCE DESCRIPTION:

GATCTGAATT ACTACAGAAA AATAATTATG TTGCTTGCTT AATNATTCCC AGGAAACTTC 60  
 GTTGTAGGCA TATATTTAT AAGAGTATTA TACAGTGTAA ACTATGCAAG TAAGTTCTAA 120  
 AATNACACAA TNATCTGTGT AATGTTTAG TCCAATNACT GTGATTTATT CAACTCTGTT 180  
 CTAAAGTTAT CTGGAATTGT CATGCTGCCT CAATTACAG AAATCTATAA TAGATTCTA 240  
 TAGAAATGTA TAAAGACGTA GCAGTCATT TGTTGTTCT AAATAGATAA CATATAAA 298

SEQ ID NO:3177

LENGTH:297

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03748

## SEQUENCE DESCRIPTION:

GATCAGAGTA TGGGTTCTCC ATGTAGCAAT ACTTCAGTGA GATTAAGTAT AAACAGTTT 60  
 TGGCAAAAAA CAACACAGTC TACTCTTCT GCTTACAAAG ACAAAAGCCTT ACAAAACTCAC 120  
 TATGAAGGTA AAGGGAGGAC AGCTTGCTTC TTTGCCAGA CATTACAAA GTGTTTTTA 180  
 AACACACTC ATAAGTAAGT TTGCAAGTT GTTAAAAAA TGTCTTTG TTTGTACAG 240  
 TTCTGTTAGA TGTTGTNATA TTTAANAGT TTAATTANA ANNTTNATT TNGTCNN 297

SEQ ID NO:3178

LENGTH:297

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03749

## SEQUENCE DESCRIPTION:

GATCTNATTA CCTTCACGGA AGGAAGCGGA CGCTCACAC GCTATGCCCT CTGGTTCTNT 60  
 GTGGGGGAGT CATGGCCCA NNACCAGCCG TGGACCAAGA GGCTCGTNAT GGTCAAGGTT 120  
 GTGCCACGT GCCTCAGGGC CTTGGTAGAA ATNGCCCGGG TAGGGGGTGC CTCCCTCCCTN 180

2153480

GAGAATACTG TNGACCTGCA CATTCCAAC AGNCACCCAC TCTCNCTNA CCTCCGACCA 240  
GTACAAGNCC TACCTGCAGG ACTTGGTGGA GGGNATGGAT TTCCAGGGNC CTGGGTN 297

SEQ ID NO:3179

LENGTH:295

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03750

SEQUENCE DESCRIPTION:

GATCATCACA TTTCGTGAAT TGAGGCCATG TTCAGGTGCT AAGGAAGTAT GCCTTNACA 60  
CAGAAAGATTG AGAAAATTTC CTAGATATAA ATACAGATAA ATCAGACGTT ACAGTGGTGA 120  
CGTAGTAACC ATCATGGCAA TGAAAGNAG TCCAATTCA AGCCTAAAC TTCAAATGTA 180  
TTCTTAGGAG TCAGATTTA CTGAATATT TACCCACAAT AGCTGCCTAT TTTGTTATAA 240  
TAAAATATATA ATAANTNTAT NTCTNNNCCT TCCTTTAACN TGTAAAANNA NNNAN 295

SEQ ID NO:3180

LENGTH:295

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03751

SEQUENCE DESCRIPTION:

GATCCCAGCA CTACTTTTA TTACTGGAGA AATGGGGGGG ATAGAAAATT CTACTTGAA 60  
TTATTTAGTT TTTTTAAAG AGTGGGTTGT GTTGTNCTT CTCCCACCTT TCAGCATTAA 120  
TAGAACATGC TGCCCCACAT ACAAAAGTCAA GACCACTAC TTTTATGTGA CACTAGTAGT 180  
TTGGGGTAA TGTTTGTGT AAGANCAGCT GCATATGAGT AAAGTTACCC CAACCACAGT 240  
GAGGAGGAAG ATGTTCACAT ACTGGAACTG TCCTGCCAAA TAAATTTGC CCCTN 295

SEQ ID NO:3181

LENGTH:294

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03752

SEQUENCE DESCRIPTION:

GATCAGTTAA TGCCTAAAGAG TGAAAAGTAGT TCTATTGACA TTCCCTCAAGA TATTTAATAT 60  
CAACTGCATT ATGTATTATG TCTGCTTTAA TCATTTAAA ACGGCAAAGA ATTATATAGA 120  
CTATGAGGTA CCTTGCTGTG TAGGAGGATG AANGGGAGT TGATAGTCTC ATAAAACCTAA 180  
TTTGGCTTCA NGTTTCATGA ATCTGTAACT AGAATTTNAT TTTCACCCCA ATAATGTTCT 240  
ATATAGCCTT TGCTAAAGAG CAACTNATAN NTTANCCCTA TTCTNTCTGT GAAA 294

SEQ ID NO:3182

LENGTH:293

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03753

SEQUENCE DESCRIPTION:

01084

2153480

GATCCGTGCT GGAAACTCGC AGGGGGACTT TTACATTAGG CAAATCAACA ACGTCAGCGC 60  
CATGCTGGTC CTCGCCCGC CGGTGACGTG CCCCCGGAG TACGTGCTGG ACCTGGAGAT 120  
GGTCACCATG AATTCCCTCA TNAGCTACCG GGCCAGCTCT GTACTGAGGC TCACCGTCTT 180  
TGTAGGGGCC TACACCTCT GAGGAGCAGG AGGGAGCCAC CCTCCNTGCA GCTACCCCTAG 240  
CTGAGGAGCC TGTTGTGAGG GNCAAGAATGA GAANGCAAT AAAGGGNGAA AGN 293

SEQ ID NO:3183

LENGTH:293

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03754

SEQUENCE DESCRIPTION:

GATCTGTGGA CTTTNATTT TTTAAGAGAC TTACTCAATT TNATGACTGT ACTACCTGAA 60  
ACAAAGTGAG AAAGGACAGG TGTATTTTC TAAGTNATCA AGATAAAATCC TTAANAATTC 120  
AGTCTAAATN AGCAACCAGG AAGGAAAAAT ATATTAAAAA CAACAAAAAA GTGGCACATG 180  
TCCAGGCAGT GTGAGGATTT GCTGTATATA AGTTGCCTGC TTTGTATTNT TNAAATCTCT 240  
GCATCACTCA TTGGAAGTGC TTCTNAAGAG AGCTGCTCTG TGTTCAGTTG AAA 293

SEQ ID NO:3184

LENGTH:395

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03755

SEQUENCE DESCRIPTION:

GATCAAGATG ACCAAGATGT ATAAAGGGTT CCAAGCCTTA GGGGATGCCG CTGACATCCG 60  
GTTCTGTNTAC ACCCCCCGCCA TGGAGAGTGT CTGCGGATAC TTCCACAGGT CCCACANNCC 120  
GCAGCGAGGA GTTTNTCATT GCTGGAAAAC TGCAGGATGG ACTCTTGAC ATCACTACCT 180  
GCAGTTTTNT GGCTCCCTGG AACAGCCTGA GCTTAGCTCA GCGCCGGGGC TTCACCAAGA 240  
CCTACACTGT TGGCTGTGAG GAATGCACAG TGTTCCCTG TTTATCCATT CCCTGCAAAC 300  
TGCAGAGTGG CACTCATTGC TTGTGGACGG ACCAGCTCT CCAAGGCTCT GAAAAGGGNT 360  
TCCAGTCCCG TCAACTTGCC TGCCTGCCTN GGGGN 395

SEQ ID NO:3185

LENGTH:290

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03756

SEQUENCE DESCRIPTION:

GATCAGCACT TNANTCGGAA AGTTGGAACC TCTGACAAGA CCAAGTACTA CCTTCAAGGT 60  
AATCCGTGGC TTCCCACAAA GTTCCACATT TAACTTCTC CAAGGAAGGG GATTAAAATT 120  
TNAAACTAAC TCCCTTCAGT TGAAATCTCG GACCACTNNN NAAAACAAAA ACCATGGTCT 180  
AATTNTTNC TTTGTTATGA ATTNTTGAC AGTGGATTGA GCGATACGTG TCAGANCTAN 240  
GCATTCACT GTAGGCAAAT TGTGTCTTAG TTATCANGTA AATGTACAAA 290

SEQ ID NO:3186

01085

2153480

LENGTH:288

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03757

SEQUENCE DESCRIPTION:

GATCCAGATG ACTGAATTTC AGATAGCATT TTTATGATT CCAACTCATT GAAGGTCTTA 60  
TTTATATAAT TTTTCCAAG CCAAGGAGAC CATTGCCAT CCAGGAAATT TGGTACAGCT 120  
GAAATATAGG CAGGATGTT AACATCAGTT TACTTGCAGC TGGAAGCATT TGTTTGAA 180  
GTTGTACATA GTAATAATAT GTCATTGTAC ATGTTGAAAG GTTCTATGG TACTAAAAGT 240  
TTGTTTATT TTATCAAACA TTAAGCTTT TTAAGAAAAT AATTGGGN 288

SEQ ID NO:3187

LENGTH:288

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03758

SEQUENCE DESCRIPTION:

GATCCCCAAA AAGTGAATAT CAATGGAGGA GCTGTTCTN TGGGACATCC AATTGGAATG 60  
TCTGGAGCCA GGATTNTGG TCATTTNACT CATGCCCTGA AGCAAGGAGA ATACGGTCTT 120  
GCCAGTATTG GCAATGGAGG AGGAGGTGCT TCTNCCCATGC TAATTCAAGA GCTGTAGACA 180  
ACCTCTGCTA TTTAAGGAGA CAACCCTATG TGACCAGAAG GCCTGCTGTA ATCAGTGTGA 240  
CTACTGTGGG TCAGCTTATA TTCAGATAAG CTGGTTTCAT TTTTNATN 288

SEQ ID NO:3188

LENGTH:285

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03759

SEQUENCE DESCRIPTION:

GATCAGCAGC TGTGAAATA AAGCTTGTNA GCCCTCTGCT GGCCACAGTA NAGGAAAGTA 60  
GCACAAATAG GATACAGTTG TATGTAGTCA TTGGCAACAA TTGCATACAA TTTTACTACC 120  
AAGAGAAGGT ATAGTATGGA AAGTCCAAT NACTTCCTTG ATTGGATGTT AACAGCTGAC 180  
TGGTGTGAGA CTTGAGGTTT CATCTAGTCC TTCAAAACTA TATGGTTGCC TAGATTCTCT 240  
CTGGAAACTG ACTTTGTCAA ATAAATAGCA GATTGTAGTG TCAAA 285

SEQ ID NO:3189

LENGTH:284

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03760

SEQUENCE DESCRIPTION:

GATCTCACCA TTATGACATC CATCCCCCTA GCTCACCAACA TAGCACATAG AATGATATT 60  
TTAATTGTA AGAGGCCATC CAGGTACTAA GGNCCCAAGG CATACTAGATT CACAAAATNA 120  
ACTAATCTTT TTGCCTCAGA ATACCAAAAC ANCAAAANTA TAAAGCTGTA TTTGGACANC 180  
TANAAAACAC CAAACTATCT CATTGCAATT NGTATTGTAG CAGATGTTCA GCAACTATCC 240

01086

2153480

TAATCANTGT TATTGTGTC CANTTTAAGT GGGTTAAATG TTTN

284

SEQ ID NO:3190

LENGTH:282

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03761

SEQUENCE DESCRIPTION:

GATCTCGACT CCCCCCTGGC CACAGACCCC CAGGTCAATTG TGTTCACTGT ACTCTGTGGG 60  
CAAGGATGGG TCCAGAACAG CCCACTTCAG GCACTAAGAG GGGCTGGACC TNTGGGCAG 120  
GAAGCCAAG AGACTGGGCC TAGGCCAGGA GTTCCCAAAT NTGAGGGGCG AGAAACAAGA 180  
CAAGCTCTC CCTTGAGAAT TCCCTGTGGA TTTTAAAAC AGATATTATT TTNTNTNATTA 240  
TTGTGACAAA ATGTTGNTAA ATGGGATATT AAATAGAATA AA 282

SEQ ID NO:3191

LENGTH:279

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03762

SEQUENCE DESCRIPTION:

GATCTGGAGA AGTAAGATGG CCAAATAAAA GCCTCTACCA ATCATCCTCC CCACAGGAAC 60  
ACCAAATTAA AGAACTATCT ACACAAAAAA GCACCTTCAT AAGAACCAAA AATCAGAGAG 120  
AACAAAGGATA AAGAAGTATC CAAATACAAA GAAAATGTTA TGCAAGTGAC CTTTAGAGAT 180  
GTTTTAAAGA TGACAAAATA TTGATGANGA TGGGCCAACAA AGTGTACTG TTACCTCTAA 240  
TAAAGTTCA TCACTAGTTT CACCATGGTT AATTGGAAA 279

SEQ ID NO:3192

LENGTH:277

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03763

SEQUENCE DESCRIPTION:

GATCTGCTCA AATGCACCAA CACTGCCAAG TGACTAAGGT AGAAAAGAAA AATAACAGGT 60  
ATCGTCATCT GAAGGACAGA TGAATCTTT TCTGCCCTT CTTCACAATG GAATATAAGG 120  
AACAAATTATG GGATGTATC AGAATGGATG CCATAGGACC TACAGCTCCC TTTCTNTTA 180  
TTGTNATTAT ACTTTAAATA TGACATTGTC TTTNATGTGT ATGTTCTAT ATTTCAATG 240  
TATCTTTTC CTTCAGTAAA CCTGATATTCA AAATAAA 277

SEQ ID NO:3193

LENGTH:277

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03764

SEQUENCE DESCRIPTION:

GATCACAGGG AGCCTGTGTT TGTTGGAGGT GTTCCAGAAT CTNTACTGAC ACCACGCTTG 60

01087

2153480

GCCCCCAGCA AACCNNTCAC AGGCTGCATA CGCCACTTTG TGATTGATGG ACACCCAGTG 120  
AGCTTCAGTA AAGCAGCCCT GNTANGCGGC GCCGTANGCA TCAACTCCTG TCCAGCAGCC 180  
TGACATGACA NAGCACAGCT GCCCAANTAC AAAGTTCTT AGNGCAATGN AAGNAACACA 240  
AAAGCCAGNC CAGGAGGCNC CAGTTNCTTA TTCTTN 277

SEQ ID NO:3194

LENGTH:272

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03765

SEQUENCE DESCRIPTION:

GATCACAGAA GCCACTGCAC TCCAGCCTGG GTGACAGAGT GAGACTCTGT CTCAAAAAAA 60  
AATTAAATAA ATTATATAA CCTTTCAGAA ATGCTGTGTG CATTNNATG TTCTTTTTT 120  
TAGCATTACT GTCACTCTCC CTAATGAAAT GTACTTCAGA GAAGCAGTAT TTTGTTAAAT 180  
AAATACATAA CCTCATTCTG ANTAATGTCC CTCATTTGA CTATAACTGT GCTTGGTTTC 240  
AAANGCAAAN TTAANCAAAA ATCTCAGTCA AA 272

SEQ ID NO:3195

LENGTH:272

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03766

SEQUENCE DESCRIPTION:

GATCTCTGC TGGTCAGTGG GGCGGGGGCA GCACTACCGT GGCCTGGTAC CAGGTGAGCC 60  
CGCTGGCCGC CGCCTGCTC TACCCCTACC TGGCCTGGCT GGCCTTCGCG ACCACACTCA 120  
ACTACTGCGT ATGGGGGAC AACCATGGCT GGCATGGGG ACGGCGGCTG CCAGAGTGAG 180  
TGCCCCGGCC ACCAGGGANT GNAGNTGNAC CAGNAGGTGC CATNANGTTT NTAATNTAGT 240  
GGCCGTNANG TTTTAATGAC CANTGGGNCT GN 272

SEQ ID NO:3196

LENGTH:269

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03767

SEQUENCE DESCRIPTION:

GATCCCACATCT NTNTCCCTT CTTCCCTCCT GGTTCCGGTC AGTTCAGAGG ATTTAACAAAT 60  
CACAACTGTC CTGCAAAAT GCCTGAACAT TATTCTTAGG CCCTCGTGGA TTTTTTTTTT 120  
CAGAAACATT AAACAAAAAA NGACTTACTA NGAAATATGT ACAGCTACCC CTGTTTCAG 180  
GCACTATGTT TGNGANCATT TTNGCCATTG ANGTTCACAC GTGGCATCAG CCCATGCAAG 240  
ATAGGTTCT GTATTNNAT ATNANNNTN 269

SEQ ID NO:3197

LENGTH:269

TYPE:nucleic acid

TOPOLOGY:linear

01088

2153480

CLONE:HUMGS03768

SEQUENCE DESCRIPTION:

GATCCAGCGA GGGGTCAGG CCCCTCTGCAT CTCCTCAGGC TCCAACCTG CTTCCCTCAGC 60  
AATNAGCTCT CCTCCAGCTT TGGCTTGGG AAGCCAGACT CCAGGGACTG AAAAGNAGCA 120  
ACAAGGAGAG GGTCTGCTTG AGAAATGCCA GATGCTTGGT CCCCAGGAAC TAAGGCAGCA 180  
GAGTGCAGGG TGGGGCAAG ACTGGGCTGT AGGGGAGCTG GACTACTTA GTCTCCTAA 240  
AGGACAAAAT AACAGTATT TTATGCAA 269

SEQ ID NO:3198

LENGTH:267

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03769

SEQUENCE DESCRIPTION:

GATCCCCCTGG AGCCCAGGAG GNAGGTGTGT NAGCTCAATC CGGACTGTAN CGAGTTGGCT 60  
GACCACATCG GCTTNAGNA GGCTTATCGG CGCTTCTACG GCCCGGTCTA GGGTGTGCGCT 120  
CTGCTGGCT GGCCGGCAAC CCCAGTTCTG CTCCNTCCA GGCACCCCTTC TTTCCTCTTC 180  
CCCTTGCCCT TGCCCTGACC TCCCAGCCCT ATGGATGTGG GGTCCCCATN ATCCCAGCTG 240  
CTCCCCAATA AACTCCAGAA GAGGAAA 267

SEQ ID NO:3199

LENGTH:266

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03770

SEQUENCE DESCRIPTION:

GATCTGAACC TGTCATTGAA AGTACAGGTT AAAGACTGTG TCCACTTTGG GCATGAAGAG 60  
TGTGGAGACT TTTCTTCCCC ATTTCCTCTC CCTCCTTTT CCTTTCCATG TTACATGAGA 120  
GACATCAATN AGGTTCTCTT CTCTTTCTTA GAAATATCTG ATGTTATATA TACATGGTCA 180  
ATAAAAATAAA ACTGGCCTGA CTTAACATAA CCATTTAAA AAATTGGGCT GTCATGTGGG 240  
AATAAAAGAA TTCTTCTTT CCTAAA 266

SEQ ID NO:3200

LENGTH:265

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03771

SEQUENCE DESCRIPTION:

GATCTGACTT GGGGAAAGGG TTATCAGAGC CTAGAGGGGC TTAAAAAGTA ATCATTGAT 60  
GTACATACCA CACTCCTTGG CCTCCCTTCT CTTCCCTAA CCCTTCTGC TTTTCATTAA 120  
CCACATTCT GCACAACCTCA TTTCTGAAAA CCTACCATGT TTCTTACAG AGCCATCCAA 180  
AAATTTTTG TCCCTACATA GCAATTCT GTGGCACTGA GAAACCATGT ATGACCACAA 240  
TAAAAATCCA TTTTGTGAAA GGAAA 265

SEQ ID NO:3201

01089

2153480

LENGTH:262

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03772

SEQUENCE DESCRIPTION:

GATCTCAGCT CACTGCAACC TCTGCCTCCT GGGTTCAAGC GATTATCCTG CCTCAGCCTC 60  
CTGAGTAGCT GGGATTACAG GCATGCGCCA CTATGCCAG ATAATNTTT TGTATTTTA 120  
GTAGAGACAG GGTTTACCA TGTGGCCAG GCTGGTCTGG AACTCCTAAC CTCAGGTTAT 180  
CCACCCACCT TTGGGCCTNC CAAAGTGCTG GGATTATAGG CATGGANCCA CCGTGNCTGG 240  
NCANAGATGT AAGTNATAAT TN 262

SEQ ID NO:3202

LENGTH:260

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03773

SEQUENCE DESCRIPTION:

GATCCACCTG CCTCGGCCTC CCAAAGTGCT GGGATTACAG GCGTGAGCAC CATGCCANC 60  
CACCTTTCT ATNTTTAGAT ACATAAACAC TCACCACTGT GTCACAGTCA CCTACAGTAT 120  
TCAGTACAGT AGCATATGCT GTACAGGCTT GTAGCCTAGG AGCAATAGGC TATACCATAT 180  
AGCCTAGGTG TGTACACCAT CTAGGTTTT CTAACTACAC TCTATGGNGT TCACACAATA 240  
AAATTGCCCA NCGACGCCAA 260

SEQ ID NO:3203

LENGTH:225

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03774

SEQUENCE DESCRIPTION:

GATCCCAGCT TATGGCCTTG ACCCAGCCGT CCTCACAGAT GCCGGGTGAC CCTCTAGCTC 60  
TCTCTGCATC TCCCACCCCC CGACACCCCTG GGACCCCTCGA CCCCACCCCT CTTTCTACC 120  
AGCCCAGAGC CTTGTGGCTT GTACAGTTTT GAAACTCCCG TTCTATTTTA TGATGGTTGA 180  
TAATAGTCAG TAACNNAATA AAGGAACGTT TGTTAAAATA TCAAA 225

SEQ ID NO:3204

LENGTH:216

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03775

SEQUENCE DESCRIPTION:

GATCTGCCCG CGGCGNACCC GTGTTATGTT TTGTGCTGTG TCCACGGCCT AAGACGACCC 60  
CCTCCCCCGT ACTGACTTCT CCTATAAGCG CTTCTCTCG CATACTCACG TAGCTCCAC 120  
CCCACCCCTCT CCCTGTGTCT CACGCAAGTT TTNNACTCTA ATATNNNNAT GGCTTTTT 180  
CTTCGGCAAA AAAATAATAA AACGTTCTT CTGAAA 216

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SEQ ID NO:3205

LENGTH:256

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03776

SEQUENCE DESCRIPTION:

GATCTGACAC TTCTTCCA TTGCTGGCC TGAACAGACT GACCTTGTA ACTTAAGCCT 60  
GGAGTCATG CCTCGTCTTC CTTTGTCA TTGCTGTTAC CAAGAAAGCC AAGGAAGAGC 120  
AGCCTGACTC ATTCTTCTTG GCTGCAGCCT CTTCCCCACT TCCTGGGAGT GACCCAGCGT 180  
TATTCTGCC TCCTCACTCC TATTCTCTT GCCTTGTGT AAAAATAAAA TGAAATAAA 240  
CAAGTTGCAC AGTAAA 256

SEQ ID NO:3206

LENGTH:256

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03777

SEQUENCE DESCRIPTION:

GATCTTTT NATCATATAT GACATTAAGG CTACAGAAGT TTTGTGCAAN AATCTTAATT 60  
CATATTATN AATTCAAGG GAATATTGAA AGGTTTAAA ATGGCATAACA GATAATGGAA 120  
AATAAGCTT ATGTTCAAG AAGGGCAGAC TCACGAATT TTTAGAAAAC AGTGCTTCTT 180  
AATGATATGC TATTATNCTT ATNAGTTATG TGCAAGCTT GTATATNCTT ATATNTATAT 240  
NTAACTNTAA CCCTCN 256

SEQ ID NO:3207

LENGTH:253

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03778

SEQUENCE DESCRIPTION:

GATCCAATT CGAGAGGTTC TAACCCCAGA ANC GGACATC TCGATTGCAC ACGTTCTGGT 60  
TGCCCCAGCC GACCTGTCTT GTCTCGTCCC AGCCACCAGC GTGGCTGTGC GNAGAGGGAC 120  
CTGCTGTGCC ATCAACAAGG TGCTTATGGG NAACGTTCCA TACCGGGGGN GCCGCCAAA 180  
TNAGCTGGAG CCTCCCATGC CCACCTGGAG NAGCNGAAGA GAGGATGGAG GCCCCCAGTG 240  
NNGGNNTCGC ANN 253

SEQ ID NO:3208

LENGTH:252

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03779

SEQUENCE DESCRIPTION:

GATCATGNTT CATGTGCTAA AAATAAACCTT GAAACACGGA AGTAGTGTT GGTCCAGTTT 60  
GAAAGCTCTT ATNAGTATTC TTCATCCTGG CTGTAATAAT AGCCATNATT TGTNATGCCT 120  
TTGTTATGTA GCAGACACTC TTAAGNATT NATGTGTATN ATTCAAATTG CTATNACTGT 180

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TCTTTTATA GTTGAGAAC TCAAGGATACC TACATTTATC ACTTTTCAA TATATATGTA 240  
TTTCTTATTA AA 252

SEQ ID NO:3209

LENGTH:251

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03780

SEQUENCE DESCRIPTION:

GATCAAGCTG TCCGAACCTA CCAAGAGCAC AAAGCAAGCA TGCAATCCC GT GACTGCAATG 60  
CTGGTGGGGA AAGACTTAAA AGTGGATTAA AGACCTGC GT ATTGATGATT TTAGAGATT 120  
CTCTTTTTA AATGGAATTC GTAAAGAAAT ATAAAACCTTC AGCTCACAAAT TAAAACGTGTC 180  
TTTTTAGTTT TGGCTTTTA TTGTTTGTT GGTGATTTA CTGAAATAAA GTTGAGCTAC 240  
TTCTTCTTAA A 251

SEQ ID NO:3210

LENGTH:250

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03781

SEQUENCE DESCRIPTION:

GATCTTGTTG TCAGATGAAA GTGCAAGTTT TTATTAATT GGATTGCC TG AACAGTGTAT 60  
CCCATGATGA TGAAGGAAAA TGGAGAGATT TTTCTTTTA ACTCTGNNNN NTCAGAGATG 120  
AAGCCACGCC TTTCCATTTC TCAATGCTGC ATATTTAAC TGCAACAAAA ATGTTAAGCC 180  
ATAACAGCCT TTTTATATT TAGTTGTCA CCTTGCATT GCAGAATAAA TACTGGNTAA 240  
CCATTTAAA 250

SEQ ID NO:3211

LENGTH:251

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03782

SEQUENCE DESCRIPTION:

GATCTTACTT GCTCCTGCTT ACGAAGATTN CCCAATNACT GGTCACTCTGA CCCTACTTGA 60  
ACACTCCTGA ACAGTCATGT TTTNAAAAT NTCCTTTAT ATCAAGTCAG AGAGTATACT 120  
TCTATAAATT TNACTCATGG ATGTTAGGAA ATCTAGTCAT CTTCCCTGTG ATTGCCCTGT 180  
TAAGTATTAA ACCATAGCTA TCATGTGTTT CCCAAATCTT CTCTAGATTA AATATCTTCA 240  
GTTACTTCAA A 251

SEQ ID NO:3212

LENGTH:250

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03783

SEQUENCE DESCRIPTION:

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GATCTAGACT GAGAACAGC CTGAGCTTTA CACAGCTGGG GTCTGTTACT CGCGTTTGT 60  
AGACTTTGT GTAATATT GTACCGTAGA CAGAATGTGA GGAGGAAGTA ACACACAGAG 120  
GAGGATGTGT GTGTATGCAT GTGTTGAAT TCACAAGGAA GAAATTATTT ATCTTGAGCT 180  
TTTCCTTTG TTATTCATT TCTATTGATT TATTAGTAAT AACAAATGATA ATAAAATGTA 240  
AATGAGCAAA 250

SEQ ID NO:3213

LENGTH:250

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03784

SEQUENCE DESCRIPTION:

GATCTAACGT GTTCCAGTGT CTGCTGAGG TGTCTAAAAA AATCAGAACAA AAACCTCTAT 60  
TATCCAGAGT CATGGGAGAG TACACNCTTT CCAGGAATAA TGTTTGGGA AACACTGAAA 120  
TNAAATCTTC CCAGTATTAT AAATTGTGA TTTAAAAAAA AGAAACTTTT CTGAATGCCT 180  
ACCTGGCGGT GTATACCAGG CAGTGTGCCA GTTTAAAAAG ATGAAAAAGA ATAAAACATT 240  
TTGAGGNAAA 250

SEQ ID NO:3214

LENGTH:250

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03785

SEQUENCE DESCRIPTION:

GATCATAGGT CTGGACACTC CATCCTTGCC AAACCTCTAC CCAAAAGTGG CCTTAAGCAC 60  
CGGAATGCCA ATNAACTAGA GACCCTCCAG CCCCCAAGGG GAGGATTGG GCAGAACCTG 120  
AGGTTTGCCT ATCCACAATC CCTCCTACAG GGCCTGGCTC ACAAAAGAG TGCAACAAAT 180  
GCTTCTATTC CATACTACG GCATTGCTCA GTAAGTTGAG GTCAAAAATA AAGGAATCAT 240  
ACATCTAAA 250

SEQ ID NO:3215

LENGTH:250

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03786

SEQUENCE DESCRIPTION:

GATCAAACGT CCATTACACAG TGTAAGGCAG CACTTAAATT TCGAACCTAA AGTTAGATG 60  
CATTGTATAA AAAAACCTAA AAGCAGTATC TGTTNNNTNNN GCTGTAAACC AAGTTGGAAG 120  
CTATTCCGGAT AATTCTTAA ATATTGATGA NCTTGGAGT ACTGTTCTN CCTTCAAAC 180  
GAATGTAATT AATNCATGAT TAAATGCACC TNATATGTTT AANCAATCTT TGTATACTN 240  
TGGGNTTTN 250

SEQ ID NO:3216

LENGTH:252

TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS03787

SEQUENCE DESCRIPTION:

GATGCCACCA CTGCCACTCT GCTGCCAGC CACAGGATT TCTGCCCTGGA GCCCTTGCC 60  
CTGTCCCTGC TGCCCTGAGGT GGCGTAGAGC AGAGGAGAAG AATTGCTCC AGGCCAGGAG 120  
CACAAATCGT TGTCAATGA ATTNTCTCC AACTCGACCT TGGTAAACGG AAATNTGGG 180  
GGTGAAGAGA AACAAATCACT ATTTTNCT TTTTATCTG GTAAATAATT AAAAGAAAAA 240  
CCGAACACTA AA 252

SEQ ID NO:3217

LENGTH:336

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03788

SEQUENCE DESCRIPTION:

GATCTGTATT GGATAAGGAC CAATGNACAG CAAAGCAAAA ATGGCTTTAA AGCTTGGTGT 60  
TACTTTNTT AAGTTGTTA ATTATAGTTA AGCAATTCA AAAATGCTCC AAAGAAATGT 120  
GAAAGGACCT TTTGTCACAG CACTTCAGAA AATACACAAC AGCCCCCTCT GCCCCCGCAC 180  
AGAAATGCTG CAGAGTATAT AAAACTTGAG ACATTTTG AGGATGCCGT ACGAGGTGTN 240  
GCCTTTATC TTGTTCCGG ATGCATATT ATTACGAGTA CTCTGGTTAA ATATTGAAAA 300  
GTTATATGCT GTAGTTTTA GTATTTGTC TTTGTN 336

SEQ ID NO:3218

LENGTH:227

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03789

SEQUENCE DESCRIPTION:

GATCTGAGT GTTATTTCT GATTGTGGTG TTGAGAGTTG CACTCCAGA AACCTTTGA 60  
GAGATGCATT TATAGCCCTA GGGGTGGTAT GACCCAAAGG TTCCTCTGTG ACAAGGTTGG 120  
CCTTGGGAAT AGTTGGCTGC CAATNTCCCT GCTCTGGTT CTCCCTCTAGA TTGANGTTG 180  
TTTCTGATG CTGTTCTTAC CAGNTGGGA AAAAAGTGTG GATTAAA 227

SEQ ID NO:3219

LENGTH:248

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03790

SEQUENCE DESCRIPTION:

GATCTGCATA GAAAATTTN ATACAATTT TTGAAAGTCC TTAGGTGAAA CATTACCCA 60  
TTAAAAAGGA AGCAGAAATA CTGAGACATG AAAGGCATTA TCAACTAATCTAGACTCTA 120  
GAACCCATTC TNGCATATCT CACGTGCAAT TTTAAAAAT AAGTTAATAA TTCANCTCAT 180  
ATCAACAAAA GCCTTGNNNA CATGGGTTN CACTNGATAT CACCTAGTGC TNANGNTAGA 240  
NGCCAANN 248

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SEQ ID NO:3220

LENGTH:245

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03791

SEQUENCE DESCRIPTION:

GATCCAGTGC TCTCCCACATCT AACAACTAAA CAGGAGCCAT TTCAAGGCAG GAGATATTTT 60  
AAACACCCAA AATNTTGGGT CTNATTNNNA AACTTTAAA CTCACTACTG ATGATTCTNA 120  
CGCTAGCGA ATTTTCCAA ACACATAGTG TGTGTNTTT GTATACACTG TATGACCCCA 180  
CCCCAAATCT TTGTATTGTC CACATTCTCC AACATAAAG CACAGNGTGG ATTTAATTAN 240  
GCAAA 245

SEQ ID NO:3221

LENGTH:244

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03792

SEQUENCE DESCRIPTION:

GATCCACCCG CGTTGGCCTC CCAACGTGCT GGGATTATAG GCGTGAGCAC CACGCCCGC 60  
CTAAAATCCA TATTCAAAGA AGCAATTCA GTTCCTTCT AAGCTTGTC AGTCAAGGGG 120  
CTCCACTGAC TTCTTAGGCC CTGTAATTAA ACCAGTCTT AAGGTTTGC AGGAAAGTCC 180  
CTTCTTCCAA GTGGTTTTTC CAAATCGCAC AATGGCAAAG CCAAACAGAG GAAGAAACAT 240  
TAAA 244

SEQ ID NO:3222

LENGTH:244

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03793

SEQUENCE DESCRIPTION:

GATCAGATTG CTGAAACACT ATGGGAACAG GTATTGAAGC CCCTGGGTGA TAATNTAATG 60  
GAGGAAAACA TAAGGCAGTC TGTAACAAAC TCTATCAAAG CAGGCCTGAC TGACCAGGTG 120  
TCTCATCATG CCAGATTAAA GACAGACTGA CAGTCATCT CCTCACGGAC TCCACTCTCT 180  
TTTTTTTNA TGCTTGCTGT ACAATGAGAA CTCAAATAAA ANTAAACCAA AGTTTACAAT 240  
CAAA 244

SEQ ID NO:3223

LENGTH:246

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03794

SEQUENCE DESCRIPTION:

GATCCAGGAG GAGCAGCACC CGAGCCCTGG AGTGGCCAG TACCCCTCCA AGAGGCCACA 60  
GTCCCAGCCA GGACAAAGTA TGCGGCCAT CCTGGTGCGN CAGGTGGGAC AATGTGAACA 120  
TGGACTCGAA GACATGGCCC TTTCTCTGTA GTTGATTTT TAAATGTGCC ATTATTGTT 180

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TTAAAAAANN CGGNAAAANG AAANGCANAC AAATAAAACA CCTTTAAGAG GCTTGAANGC 240  
GNCAAA 246

SEQ ID NO:3224

LENGTH:243

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03795

SEQUENCE DESCRIPTION:

GATCATAACT CATGAATATG TTTGTAATCA TGGTAATTG GATTTNATG AGGAATGAGT 60  
ATCTGGAAAT ATTGTAGCAA TACTTGGTTT AAAATTTGG ACCTGAGACA CTGTGGCTGT 120  
CTAATGTAAT CCTTAAAAAA TTCTCTGCAT TGTCAGTAAA TGTAGTATAT TATTGTACAG 180  
CTACTCATAA TTTTTAAAG TTTATGAAGT TATATTATC AAATAAAAC TTCCNATAT 240  
AAA 243

SEQ ID NO:3225

LENGTH:241

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03796

SEQUENCE DESCRIPTION:

GATCTGACCT TTTTTTCCA GTTGAAATGT ATTAACACAC CTTCCACAAT NTTTTATAA 60  
GAGTCAGCAT AACATAGTGG ATAAGAACTG TGAGATGTTT AACCTCTCAG TAACTCGGTT 120  
CTCTCATTAT AAAATAGGAA TAAAATCAGT ACCTGTTCA TATGAAGGTC GTTCTGAGA 180  
ATTTAAATGGA CTAATGTATG CAAAAAGCCT GGCAAACAAT AAACACTCAT CTGACTTTAA 240  
A 241

SEQ ID NO:3226

LENGTH:240

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03797

SEQUENCE DESCRIPTION:

GATCAAAATA TATTTGTCCA GAAACTCTTG GGCCAGTTCT CTGAGAAGGA ACTGGCTGCT 60  
GAAAAGAAAC GCATCCTGCA CTGCCCTGGGG CTTGCAGAAG AAATCCAGAA ATATTGCTGT 120  
TCAAGGAAGT AAGAGGGAGGA GGTGATGTAG CACTTCCAAG ATGGCACCCAG CATTGGTTC 180  
TTCTCAAGAG TTGACCATTAA TCTCTATTCT TAAAATTAAA CATGTTGGGG AAACAAGAAA 240

SEQ ID NO:3227

LENGTH:239

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03798

SEQUENCE DESCRIPTION:

GATCCTCCCA CCTNCAGCCT CCCAAGTAGC TGGGACTACA GGCACATGCT ACCATGCCA 60

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GCTAATTAAA AAAAATTTT TTTTGTAGA GACGGAGTT CACTGTGTTG CTCAGGCTGG 120  
TCTTGAACTC CTGAGTTCAN GCAACCCCTCC ACTTCAGCTT CCCAAAGTGC TGGGATTACA 180  
GGCATCACTG GCCCAGGCAG AGCCAATTNT GTATAATAAA TCTGTNTCTC TCTGTCAAA 239

SEQ ID NO:3228

LENGTH:238

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03799

SEQUENCE DESCRIPTION:

GATCAAATTT NATTGAATGG TTGAGGTTG TAGCTCTATA AATAGTAGTT TTTAACATGC 60  
CTGTAGTATT GCTAACTGCA AAAACATACT CTTTGTACAA GAGGTGCTTC TAAGANTTTN 120  
ATTGACATTA ATGACACTGT ATACAATAAA NGTGTAGTTN CTNAATCGCA CTACCTATGC 180  
AACACTGTGT ATNAGGTTA TCATCCTCAT GTATTNTNNT GTGACCTGTA TGTNTATN 238

SEQ ID NO:3229

LENGTH:237

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03800

SEQUENCE DESCRIPTION:

GATCCAAAGC CATCCCAGAC CTCCCCGGC CCCTCTTCCT GGCAGATGAC TCTCCCCGCT 60  
TCTGCGTCCCT GCCTGCCCAT TCATACCAGT TTGAACGTCA ACAGCCTAGC TCCTCACCTG 120  
TGCACCTCCT TCCCCAGGTG TGACACGTCTC CAGCCCCGAG CGCGTGTCTT CCTGCTCATC 180  
TGGGTTCCCT GGGCAAATAG TGGCCCTCAA TAAATNTTG CTGAGTGAGA ACATAAA 237

SEQ ID NO:3230

LENGTH:515

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03801

SEQUENCE DESCRIPTION:

GATGCCAGA GCCCAGGAGT TTGAGGCTGC AGTGAGCTAT GAGGGTGCCT CTTGCTCCA 60  
TCCTAGGCAA CAGAGTGAGA CGCTGTTAA AAAGGAAAAAA ATCCTCCNT AGAGCTAGTA 120  
TCCTAAAGCT GCAGAGCTAG CCCATGACCT CATTGGTTTC NTTGTCCCTG GGGTGCTTT 180  
CCTGAATCTT TGGGGGTGAA GGGAGTNTTG CTCCCAGTCC AGAGGCCTGA TTCTTTCGG 240  
ACTGGGTTCT CAAGACACGA CCAGGTTCTC AAGACACGAG TCCCCTTNT CCTNCCATT 300  
AAAGGGGGTT TNTNAGAAGC AAGANCAGCC CCTTTCCCA AGTCACAGCC TGAAGGGAGG 360  
CCCCNGAGAN GCTTCCCTCC TTTCCCNCA CCCTGNTTCC TTAACCTNT TTTGNCCCTG 420  
NTTTTTTTAG GAANCTGGNA GTTCAATTN GTTTTAANG GGGGATTGGG GGGGAAGGGA 480  
AGNCTTNGGG GGACAAAAAA NNNTTTNTT NCAAN 515

SEQ ID NO:3231

LENGTH:227

TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS03802

SEQUENCE DESCRIPTION:

GATCA GTGTA TGC GAA AAGG TTT TAGGA GTATGGCAA AAT GTTGTAT TGGCTATGAT 60  
GGT GAC ATGA TATA GT CAGC TG CTT TAA GAG GTCTT AT CTGTCAGTG TTA AGTGATT 120  
TAAAAAATA ATA ACCTGTT TTCTGACTAG TTTAAAGATG GATTGAAAA TGGTTTGAA 180  
TGCA ATTAGG TTATGCTATT TG GACAATAA ACTCACCTG ACCTAAA 227

SEQ ID NO:3232

LENGTH:224

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03803

SEQUENCE DESCRIPTION:

GAT CACTAGC TAAT NCTCAT ATCCATGCCT TTTTGTCCCTG TTTACAGTCT TAAAAGAGGT 60  
AAA ACAGCAA ATATTTTN AAGGAACTA TAACCTTAGG ATTCCTGAAA ANAATTCAA 120  
AAAAAAATA AAGACACTGT TGCCAATGTG NCCC AAAACT TAAGACCATA CTAATGGCAT 180  
ATATTTGTNA CAATNAAAAA TTAANTTAC TACTTAATCC TAAA 224

SEQ ID NO:3233

LENGTH:310

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03804

SEQUENCE DESCRIPTION:

GAT CGGTGCT TTGTGTAAT ACATCTTAA CATTGGGTG GAGAGGGCC TTAAGAAGGA 60  
CAG TTCATG TAGGAAAGCA ATTCTGTACA TGAGTTAAC CATTCTGTT GCATTGTCTC 120  
TG CAG ATTCT ATTTTGTTT ACAATATTAA AAT GTATGTN AG CAAAATGG GTGGATTTTC 180  
AAATAAAATG CAG CTTCCAC AAAAGTTTG TNATGGTATT CTGGTCTGAG ATGCATTNC 240  
ATTTN CCTN TCTCTNTA TTATCAATAT TGTNATTTT CCCTAATAAA ATATA CCCAG 300  
GTGNATTAAA 310

SEQ ID NO:3234

LENGTH:220

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03805

SEQUENCE DESCRIPTION:

GAT CAA ATT TTNAGACAAT CCTTGGTCTG GATTGGTTAA TGAAAATNTN TTGTTAAGA 60  
GGTTCTATTA AAAAATATT CTAGTGTATT AGTCATAATT NTTTTGTGG AGTGGGGTA 120  
AAC CAC ACCA TTAAGGGAAT AAAATGTAAAT TTGAAGAGGG TGATTATAAG ATTTGTTCA 180  
GGCCCCAAAA TATAAATAAA AATTGGTGTG GAATCTAAA 220

SEQ ID NO:3235

LENGTH:219

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TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03806

SEQUENCE DESCRIPTION:

GATCGATACA GAGCATCTGC ACTGGGATTG TCCGCCCGC CTGTCAAGGA GGCCTCGGGG 60  
GCTAATNGAG CTGAGGGTAT AGTCGGCCTT GGACCCCTCGC TTTTTCCCT TCCTGTACTA 120  
TNAAGATAAC TGCCCTTATCT CCCCCTCAGG ACTGTTTGG GGATTAATAA GGACGTTAA 180  
ATNACCAACG CTCTTGAAA TAAACATTTC AAAATTAAA 219

SEQ ID NO:3236

LENGTH:219

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03807

SEQUENCE DESCRIPTION:

GATCAAAAAA ACTTTCTTC TTTGCAAAG AAAGCTTTT GTTTTAACN GCAACGTACT 60  
TTTCCCCTAC CTTGAAGAGA CATGGTGGTC GCAGCTTCTN ATCTATATGA AAAAGTTTC 120  
GATGTATTGG AATNATTGG GAATGCTTTT AAAACAATT GTAATTATTT CTTACAAAC 180  
CAAAACAGAA CAGAAAGGTG TGGTGCTGGA ACATCGAAA 219

SEQ ID NO:3237

LENGTH:265

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03808

SEQUENCE DESCRIPTION:

GATCTGCATT TTCAGAACAG GACAATCAAT TGAAACTAAG TAGGGGTTTC TTCTTTGGC 60  
AAGACTTGTA CTCTCTCAC C TGGCCTGTTT CATTATTTG TATTATCTGC CTGGTCCCTG 120  
AGGCCTCTGG GTCTCTCCTC TCCCTTGCAG GTTGGGTTT GAAGCTGAGG AACTACAAAG 180  
TTGATGATT CTTTTTATC TTTATGCCTG CAATTTACCA TAGCTACCCAC TAGGTGGATA 240  
GTAAATTAT ACTTATGTTT CCAAA 265

SEQ ID NO:3238

LENGTH:217

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03809

SEQUENCE DESCRIPTION:

GATCTACTAT AAGGTATTCT ATATTTATAT NACTCAGAG ACGCGTATGT AATAAAGNAC 60  
GCCCTCCCTC CAGTGTCCAC ATCCAGTTCA CCCAGAGGG TCGGGCAGGT TGACATATT 120  
ATTTTGCT ATTCTGTAGG CTTCCATGTC CAGAACCTG CTTAAGGTTT TAGGGTACCT 180  
TCAGTACTTT TTGCAATAAA AGTATTCCT ATCCAAA 217

SEQ ID NO:3239

LENGTH:217

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TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03810

SEQUENCE DESCRIPTION:

GATCGGTGCT ACCAAGGAAG AGAGCACACA GATAAGACAG AGGGGAGGAG GTGGGCATTT 60  
CCTACATTCC TCCTGTGTTN CCGCTGCTGA NATTGCAGTA TTTATTGCAA TNTAAATNTA 120  
TCCTGAAGGT GGGGAGGAAT GTTAAANCTA CCATNTCCGT GTGTCATCTT GGTNTGTTT 180  
TNTCCCTGTT TGTAGCAAGA CTCTNATGAT AATNCTN 217

SEQ ID NO:3240

LENGTH:217

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03811

SEQUENCE DESCRIPTION:

GATCTATATG AAGTGGGAAT ACAGCATATA TCTGGATATT CTTATAGTTA TCTTTTAAC 60  
ATCTTATTTT TTTCATTAAT TACATATCAA CATTAATNTT GTATCTNGAA GCAAATNGAT 120  
TTTGTATAAT TAAATGTGTC AAGCATCTGT ATTAATTGAT TNGATGGCAT AAGGTATGAA 180  
ANTANTGTAC TGCCCCATGT ATNACTGTTC CAACCAN 217

SEQ ID NO:3241

LENGTH:214

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03812

SEQUENCE DESCRIPTION:

GATCATAAGA CCAGGAGTTC AAGACCGGTC TGGCCAACAT GGTGAAGCCT CATTNTACT 60  
AAAAATACAA AATNAGCCAG GTGTGGCGTC ACATGCCGT AATCCCAGCT ACTCAGGAAG 120  
CTGAGGCAGG AGAATTGTTT GAACCTGGAA GGTGGAGGTT GCAGTGAGCC GAGATTGTGC 180  
CACTGCACCT GACAGAGCGA GACTCTGTCT CAAA 214

SEQ ID NO:3242

LENGTH:214

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03813

SEQUENCE DESCRIPTION:

GATCATCGAG GACGAGAAGA TGGTGGTGGT GGCGNTGCAG CCGACTGCAG AGCTNGAGGT 60  
GGGCTCGCG GAGGTATTG TGGAGTCCTT GGCCCAGGGN GGCTGGCCT CCCAGCTCCC 120  
CGGCCAGAGA CTGTGTGCAG AGNAGAGCTT CACCGGCCAG GTGTCTGGA GCCCTCCCTC 180  
ATNATNACAG CTGCTGTCCC CGAGGACTGT GATN 214

SEQ ID NO:3243

LENGTH:212

TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS03814

SEQUENCE DESCRIPTION:

GATCTGGGGA GCTNTGACTG AAGGGGCTTG GTCTTCACT CAGCATCAGC NTGGCAGTCA 60  
CCACCCCCAGT NAGGACCTCG ATGTCCAGCT GCTGTCAGGT CTGATAGTCC TCTGCTAAAA 120  
CAACACGATT TACATAAAA ATCTTACACA TCTGCCACCG GAAATACCAT GCACAGAGTC 180  
CTTAAAAAAT AGAGTGCAGT ATTTAACCCA AA 212

SEQ ID NO:3244

LENGTH:211

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03815

SEQUENCE DESCRIPTION:

GATCTCTGTA GACTAGAGTC TTGCAGCAAC ACAGAAATGTA ATATAAGGCA AATGCATCTG 60  
GGACTTGACC AAAGTTGTT TGTTTTGTTT TTTTAACTGA AAGTAACAGA AGGACCTTTC 120  
TTAAATGTGA CAGATGGTCC TGCA GTGTGA ACCTGAAGGA CAGTGTAAA GCTGGGCTCT 180  
AGTATATTGA TGATTCTGC ATAAGTGTGG N 211

SEQ ID NO:3245

LENGTH:210

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03816

SEQUENCE DESCRIPTION:

GATCTATTT TGCAGTGGAA TATCTGAGAA TTGCAAAACT AGACAAAAGT TTCACAACAG 60  
ATTTCTAAGT TAAATCATTT TCATTAAGG GAAAAAAAGAA AAAAATTTT GTATGTCAAT 120  
AACTTTATAT GANGTATTAA NNTGCATATT TCTATGTNGT AATATANTGN GTCACAAANT 180  
AANGCTGTGA CAGTNCTGTT GGTCTACAAA 210

SEQ ID NO:3246

LENGTH:210

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03817

SEQUENCE DESCRIPTION:

GATCTTTAC CACTAAAAGA GCATTATTCT CATGTCTAA TGAGAATAAT AATTACATA 60  
CTTGGCATAA TAAATGCCTA AAAGACATTT TATTNTCTGA ATCTATTCTT TTCTTGCTAT 120  
AATGGGGATA TTGTAATAA TGCA TTGTAA TTAATGGTAT TTCTTAAAGC AATCTATGTA 180  
ACTGTAAATT AAACCAATCT ACAAACTAAA 210

SEQ ID NO:3247

LENGTH:210

TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS03818

SEQUENCE DESCRIPTION:

GATCAGAACT GGCTAATTAA TTTNATTCTT NATTATTAA TCCAGAGGGT ACTTTTTAA 60  
TGGATATTCG TAAATCTNCC ACTTAACCAC TGAAAATAAT NTTNTTTAA TCCCACCCCTT 120  
CCATCCATAC CTCTGCCTCC CCAAAAAGCT CCTATNAATT TNCTTATCCC CCTCATGTAG 180  
CTAGTTGAAT GTGAATAAAT AACATGGAAA 210

SEQ ID NO:3248

LENGTH:206

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03819

SEQUENCE DESCRIPTION:

GATCTCCATT CTTTGCCATG AGGGCCAACA CATGAGACCC CACCTCCCTC CCTGCCTGCC 60  
AGCCCTAGAC TTGTGGAGC ATAGAGCCCT TCCTCCCCAG GCCTAAGTAT GTGGAGCTCT 120  
GCTTGGCAC TGCCCCGCAG AGGCCACGCC TATTTATTCT GTTTCTNTG TTTTGT 180  
AACAACTATA CTTTGACAC ATGAAA 206

SEQ ID NO:3249

LENGTH:209

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03820

SEQUENCE DESCRIPTION:

GATCCCCAGA GTTGGTCCAA GGAGGGAGAG TGGGTTCTCA ATACGGTACC AAAGATATAA 60  
TCACCTAGGN TTACAAATAT TTNAGGACT CACGTTAATC CACATTATA CAGCAGAAAT 120  
GCTATTTGT ATGCTGTTAA GTTTTCTAT CTGTGTACTT TTTTTAAGG GAAAGATTTT 180  
AATATTAANC CTGGTGCTTC TCACTCAAA 209

SEQ ID NO:3250

LENGTH:335

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03821

SEQUENCE DESCRIPTION:

GATCTGTGTG GTCCCCGACG TAACATCTGG CGAGACCCCTG CCCTCTGCTG TTACCTGAGT 60  
CCTGGGGATG AACAGGTCAA CTGCTTCAAC ATCAATTATC TGAGGAACGT GGCTCTAGTG 120  
TCTGGAGACA CTGAGAACGC CAAGGGCCAG GGGGAGCNNG GCTCAACTGG AGGAACAAAT 180  
ATCAGCTCCA CCTCTGAGCC CAAGGAAGAN TGAGTCACCC CAGAGCCCTA GAGGGTCAGA 240  
TGGGGGGAAAC CCACCCCTGCC CCACCCATCT GANCACTCAT TACACTAAAC AACTTTTGG 300  
GNAANTNTNA TNTATGATGN GNNGNGNGTG GGGAN 335

SEQ ID NO:3251

LENGTH:207

TYPE:nucleic acid

01102

2153480

TOPOLOGY:linear

CLONE:HUMGS03822

SEQUENCE DESCRIPTION:

GATCTAATTTC TNCACCTCTG CTCCAAGGGC TGGGCTGTGG GTGGGATACT GGGATTTGG 60  
GCCACTGGAT TTTCCTAAAC TTGTCCCCC CTTTACTCTC CCTCTATTT NCTCTCTTA 120  
GACTCCCTCA GACCTGTAAC CAGCTTTGTG TCTTTTNCC TNTNCTCT TTTAAACCAT 180  
GCATTATAAC TTTGAAAGCA AAACAAA 207

SEQ ID NO:3252

LENGTH:201

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03823

SEQUENCE DESCRIPTION:

GATCTCATTT NAATGATTTA TAGGTAAATA CTAATCAGAC ATTATTAAGA GCAAAACAGG 60  
AAAAAGGTAA ACTTCTTAAAC TTAGTTACC TATAAAATT GTCAATNTN ATTCTTAAAC 120  
AACACATGGA CTTACTATAA AAGCCTTTT GTACTAGTGA AAAGAATCTT CAGCTATATA 180  
GAAATAAAGT TATACTTTAA A 201

SEQ ID NO:3253

LENGTH:201

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03824

SEQUENCE DESCRIPTION:

GATCCCTAAA AGACAAAAGA GTCTTGAAA GGACTGCTGG CTTCGTCTTG AACGTTGCC 60  
CCATCACCAAG TGTGAGTCCG TGAGGAAGTC TTCCTCAAGT GGGGTTCAAGT CTGTAATTTT 120  
CCTGTCTGTT CTTAGCNNG TTCTGAGTTA TTTTGATT TTTCTTTAG CCAAATAAAG 180  
GCAGTGTGGT TTTACCTGAA A 201

SEQ ID NO:3254

LENGTH:200

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03825

SEQUENCE DESCRIPTION:

GATCCTAATG GTGCTGCCCT ATTATACCT GGGTCTGCAT TAAAAGGAA AGCCCCCCT 60  
GTTGTAGATT TCATCTGCTT CCTCCTTAGG GNAGGCTGGG ATATGATGAG AGATTCCAGC 120  
CCAAGCCCGG CCCCCCACCG CCAGGCCATA GGGCATANTT TGCATCTCAA ATCTGAGGAA 180  
TAAACTGATG ACCTGTGAAA 200

SEQ ID NO:3255

LENGTH:391

TYPE:nucleic acid

TOPOLOGY:linear

01103

2153480

CLONE:HUMGS03826

SEQUENCE DESCRIPTION:

GATCAAGCAT TTGCGTTGG ATGGAATCG CATCTAGAA ACCAGCTTC CACCGGATAT 60  
GTATGAATGT CTACGTGTTG CTAACGAAGT CACTCTTAAT TAATATCTGT ATCCTGGAAC 120  
AATATTAT GGTTATGTTT TTCTGTGTGT CAGTTTCAT AGTATCCATA TTTTATTACT 180  
GTTTATTACT TCCATGAATT TTAAATCTG AGGGAAATGT TTTGAAACA TTTATTTTT 240  
TTAAAGAAAA GATGAAAGGC AGGCCTATT CATCACAAGA NCACACACAT ATACACGGTT 300  
AGACATCAA CTCAATGCTT TATTTGTNAA TTAGTGGTT TTNTATTCT ACTGTCAAAT 360  
GATGTGCAAA ACCTTTTNC CGGGTTGCAT N 391

SEQ ID NO:3256

LENGTH:194

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03827

SEQUENCE DESCRIPTION:

GATCTTAAT TTGNATGGTG ATGAATGTCT TAGTCATGAA GAGTTCTAT GGGGTGTNAA 60  
AAAACAGAAC GCATCGAGGT TNATGGGTAC CACAACATCA GAGTACACAA GAATACTGGA 120  
AGTGTGTGAA GAAAGAAAGC ATAAAGGAG TAAANGANGT CTGAAACAN GCTGGAAANG 180  
GTCTTTTNA ATNN 194

SEQ ID NO:3257

LENGTH:190

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03828

SEQUENCE DESCRIPTION:

GATCTAGTAG GTTCTTATT TTCCTTCTC TTTACAATGC ACATAATACT TTCCTGTATT 60  
TATATCAAA CGTGATAGT GTAAATNTG AATNACTTT TTTGTGAATG AAAATCTAAA 120  
ATCTTTGTAATTTTATAT CTGCTTTGT TTCACCAAAG AAACCTAAAA TCCTCTTTT 180  
ACTACACAAA 190

SEQ ID NO:3258

LENGTH:190

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03829

SEQUENCE DESCRIPTION:

GATCCCCCTT TNTCTGGAG CTTCCGTGCC TCCCCTGCCT CTTCCAGCC CTTGTAATCC 60  
TCCTTCACAG GCCAGCCAGA TACCTGTNTG GCCTNTGGGC CCATTTNTT CCCTGTCTGT 120  
CCCCACCCCA CAAGAACCAAG GTTCTNTAA TAAATTCTCT CCCTTCTTA GCCAGGACTT 180  
AGCCCGCAAA 190

SEQ ID NO:3259

LENGTH:189

01104

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03830

SEQUENCE DESCRIPTION:

GATCTNAGAG CCTGCCAAC AGCAGGGAAG CCAAGCACCC ATTCAATCCCC CTGCCCTT 60  
CTAACTGCGT ANTGANAAAGG GGAACAGTGC CATGTACAC ACAGATGTTA CTGTCTCCTC 120  
GCATGGCAT AGGGACCCAT CATTNATGAC TGATGAAACC ATGTAATAAA GCATCTCTGG 180  
GGAGGGAAA 189

SEQ ID NO:3260

LENGTH:188

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03831

SEQUENCE DESCRIPTION:

GATCCCCCTTC CTATCAATCA CCTGATAGCA ACAGGGACAG CTGCCAATAC CCTGCTCTT 60  
ACTCAATGGT ACCCAGGGAG GGAGCATGGG AAGAGGGTGA GCTGAGGGCT GGAGGAGGGC 120  
AACAGCCACT GGGTGAGCTG TTCACGGTCT TATACTATTG TTTGTNATTA AAAGTGCTTC 180  
AACCCAAA 188

SEQ ID NO:3261

LENGTH:184

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03832

SEQUENCE DESCRIPTION:

GATCAACAAG GCCACGCCCT ACAACTACCC AGTCCCCGTC CGTGATGATG GGAACATGCC 60  
CGACGTGCC AGCCACCCCC AGGACCCCTCA GGGCCCCAGC CTGGAGTGGC TGAAGAAACT 120  
GTGAGCACCT CCACTGACAG AGGCGGCCCC TCCCACGGNT CCCAATAAAA ATGTGAAAC 180  
CAAA 184

SEQ ID NO:3262

LENGTH:184

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03833

SEQUENCE DESCRIPTION:

GATCCACCAA TGTTCAAAT AGGACTATAA CTTATTCAA GGCCAATNAT ACTTCGCATA 60  
ATTCAATTT AATATTATTC ACATTCATG TCACAAATT AGTAAGTTAC ATGTGTTATG 120  
TGATGTTTG TTTGATAGA TTATATCTTA CTCTAAATA AAANGTCAAG ATTTTGTAG 180  
CAAA 184

SEQ ID NO:3263

LENGTH:181

TYPE:nucleic acid

2153480

TOPOLOGY:linear

CLONE:HUMGS03835

SEQUENCE DESCRIPTION:

GATCTCTCTG TGTGGAATGC CTTGGTGAGA GAGATGCTTA TAATNACTAT NATNATTCT 60  
AACCAAGCTT CTATNAATNT AATTCTAAT AATACACTAT CTTGATTGTA CTCTCCAGAA 120  
AATTTNCTG TCAGTGAAAA TAAAAGAAAA ATTAAAGTAA AGCTAAGGAA CTGTCTATAA 180  
A 181

SEQ ID NO:3264

LENGTH:180

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03836

SEQUENCE DESCRIPTION:

GATCCCTGGA CCATCTGCAT CCAGAGGACC GTCCGTAACG GCCGGGGTC CAGGCCGACC 60  
TTGTGGTGAC CCGGCTCGGG CNTNTCTCG GTTTCNTGC CTCACCCGCG GAGAGCGCTG 120  
AACCTGGACA AGCAGCGGCT GGNAAGNACA GGTCCAATAA ACGCCCTCTG CGCCCAGAAA 180

SEQ ID NO:3265

LENGTH:227

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03837

SEQUENCE DESCRIPTION:

GATCTAGTTC AGAAGGAAGC AAAATCCCTT AATCTATGTG CACCGTTGGG ACCAATGCCT 60  
TAATTAAGA ATTTAAAAAA GTTGTAAATAG AGAATATTTT TGGCATTCT CTAATGTTGT 120  
GTGTTTNTTT TTNGTGTGTN CTGGAGGGAG GGGATTTAAT TTNAATTNA AAATGTTAG 180  
GAAATTNTN CAAGGAANCT TTTAATAAN GTATATNGAA AGNTAAA 227

SEQ ID NO:3266

LENGTH:171

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03838

SEQUENCE DESCRIPTION:

GATCACTTCT CCTTGGCTTC CTTCTTTCT GTGCTTGCAT CAGTGTGGAC TCCTAGAACG 60  
TGCGACCTGC CTCAAGAAAA TGCAAGTTTC AAAAACAGAC TCAGCATTCGA GCCTCCAATG 120  
AATAAGACAT CTTCCAAGCA TATAAACAT TGCTTTGGTT TCCTTTGAA A 171

SEQ ID NO:3267

LENGTH:338

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03839

SEQUENCE DESCRIPTION:

01106

2153480

GATCACTTAA TTTGCTAGGG AGGGAAGTCC TAGGGTGGTT TCAGTTCTC CCAGACATA 60  
CTAAATTAA ACATCAATCC TTTAAAGAA AATCTGTATT TCAAAGAAC TTTCTCTGCA 120  
GTAAATCTCG CAGGGAAATT TGCACATTAA CACTTGAAAG TTGTTATTGT TAACCTTTC 180  
GGCAGCTTT AATAGGAAAG TTAAACGTTT TAAACATGGT AGTACTGGAA ATTTNCAAG 240  
ACTTTACCT AGCACTTAAN TATGTATAAN TGTACATAAN GACAANCTAG TAAGCNTGGC 300  
CTGGGGANAT GGTCAGNCCT TGTNTTGTGT TTTGGCN 338

SEQ ID NO:3268

LENGTH:170

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03840

SEQUENCE DESCRIPTION:

GATCATAGGA GAAAACCATT TCANATGACA AGAGCACCTC AAAGGCAGCA GCCTCAAGGA 60  
GCAGCCATGG CCCCAGACTT GTGCACGGA TGCAAGAAAC TTAATGGAGG AGGCTGAGGT 120  
CAGAATGGGA AGAGTTTTA AAAAATAAAA AGGGGAGCTA ATATGTGAAA 170

SEQ ID NO:3269

LENGTH:168

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03841

SEQUENCE DESCRIPTION:

GATCAAGGGC AAAAAGCTGGT CATTAAGTNA TCTAANATTAA ATNATTAG CCACTAAGTA 60  
ATTTNTTAC TCTNACTTTA AACTCACCAA AGAAGATTCT TTTAAAGAAA TTATGAAAAA 120  
TGTACAATTAA AACATTAA ATAANTAGTG ACAGANGTTG TTTATAAA 168

SEQ ID NO:3270

LENGTH:167

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03842

SEQUENCE DESCRIPTION:

GATCCTCTG CCCCAGCATT CCAAAGTGCT GGGATTACAG GTGTGAGCNA CTGCCCTGGCC 60  
TGGCCGTAGG TTTGTAAGT TTTCATAGAA GAGCCCTGGA GAAGACAGTA GAATNAGCCT 120  
ATCTAGTTA AAAAATAAAAG AAGCACGTTG ATTCACCAAC CGCCAAA 167

SEQ ID NO:3271

LENGTH:167

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03843

SEQUENCE DESCRIPTION:

GATCAGCTTT GTTTTCCCA GAGTCATGC AAATAGAAC TGGCTTCTNT AAGTNAGCAT 60  
CATGGACTTG GTTNAATTG GCCCGTNTG CTGAGTGTAT CTTTAGCTTG TCCCTTTAA 120

01107

CTGACGAGTA GTATTCCACA GTNTGGATGC ACTGTATTNN NTTTATN

167

SEQ ID NO:3272

LENGTH:166

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03844

SEQUENCE DESCRIPTION:

GATCAGAGCA TTGTGCAATA CAGTTTCATT AACTCCTTCC CCCGCTCCCC CAAAAATTTG 60  
 AATTTTTTT TCAACACTCT TACACCTGTT ATGGAAAATG TCAACCTTG TAAGAAAACC 120  
 ANANTAAAAN TTGAAAANTA AAAACCNAA ACATTTGCAC CAGAAA 166

SEQ ID NO:3273

LENGTH:165

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03845

SEQUENCE DESCRIPTION:

GATCTNTTT TTTCCCTTCT TGATCATCC CTTTGGGTTT TTCGGTTTGC TTTGGTTTTT 60  
 AATTTTNCTT TGTTTTNCT ATAATCCTG TTTAATCTT ATAAGGGAAA ATNCATTTN 120  
 TTCAACTGTN CTAGTTAATA ATGAGAACTC AATTNCTGGA AATNN 165

SEQ ID NO:3274

LENGTH:163

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03846

SEQUENCE DESCRIPTION:

GATCTCAGGA ATNACATTTT CCAACAGACC AAAAAATGTT TTCATGTAGC AGCAATGCAG 60  
 ATTTGGTGAA TATTTAATAT ATATTTAAGT ATGTATTCA CTTTATNACT GACAATNAAA 120  
 AAATATTGTT TGGCCAAATA GTAAACACCC TTTTGAAACC AAA 163

SEQ ID NO:3275

LENGTH:163

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03847

SEQUENCE DESCRIPTION:

GATCCCTTNG TTTGCTTAAT AAATTATAAA ATAATGGCTT GGAAAAGCAG GCTAGTCTAA 60  
 CCATGGTGCT ATNATNAGGC TTGCTTGTAA CACACACAGG TCTAAGCCTA GTATGTCAAT 120  
 AAAGCAAATA CTTACTGTAA TGTTTCTATT AATGATTCCC AAA 163

SEQ ID NO:3276

LENGTH:164

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03848

SEQUENCE DESCRIPTION:

GATCTGTTCT TGGTATTNN TTTGTTTG TTTGGTTT TAAATGTAAT CACCCATTGG 60  
 TCAGGCCAG GACTGGTCAC CATGAGCTCT GCTAGCCACG GCCCAACGA TGCTTCCGGC 120  
 TCTCATGGAT TCCACAGCAA ATAAAACGT GCTGACAACA GAAA 164

SEQ ID NO:3277

LENGTH:162

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03849

SEQUENCE DESCRIPTION:

GATCTGGGGT CCCTAAGTCC CTCTCTTAA AGAACTTCTG CGGGTCAGAC TCTGAAGCCG 60  
 AGTTGCTGTG GGCGTCCCCG GAAGCAGAGC GCCACACTCG CTGCTTAAGC TCCCCAGCT 120  
 CTTTCCAGAA AACATTAAC TCAGAATTGT GTTTTCAGCA AA 162

SEQ ID NO:3278

LENGTH:162

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03850

SEQUENCE DESCRIPTION:

GATCCTAGGA ACTCCTATNT TCAGAAAAGA ATTTTNTCC TACTATATAA TTACAGTATT 60  
 TAGCTGTCAA TTTAAGATG AATTGGTAG AGCCTTATAG TAAAGNATGT ATCTGGTCA 120  
 CACACAAAGC TTGGAAAAAG TAAAAGATGT CTAACCATA AA 162

SEQ ID NO:3279

LENGTH:160

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03851

SEQUENCE DESCRIPTION:

GATCAAGAAG TAGCCGAGGT TGATAAAAAC ATAGAACTTT TGAAAAGAA GGATGAAGAA 60  
 CTCAGTTCTG CTCTGGAAAA AATGGAAAAT CAGTCTGAAA ACAATGATAT CGATGAAGTT 120  
 ATCATTCCA CAGCTGCTCA ATAAAGTACA AGAGCTAAA 160

SEQ ID NO:3280

LENGTH:177

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03852

SEQUENCE DESCRIPTION:

GATCGTGGGT CAGGGACACC GAGAGAGTGA GGTCACTTCC ACTTCAAACC TTCAGTGAGG 60  
 GGGTGGGATG GAGAGAATGC TGAATTTT TTTNACGGG ATGGGGTTT CNTCTTGTA 120

ATTATNNCTT TAGTTAATT AACCTTTGG TTGTTGTNC AATATTATAT ATNNNAN 177

SEQ ID NO:3281

LENGTH:232

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03853

SEQUENCE DESCRIPTION:

GATCAGGACT ATAATATTGT ACAGTTATA TAGGGCTTT GGGGAAGGGG AGGATAGCGA 60  
 GAAGATGCTC TGGGGTTTT GTTTTGCTT TTCCTTCAGG GTTTATTT TGACTGTTT 120  
 GTTTCTNGT NGGCCATTTC TGTATTGCTG GCATCTGTC TAAGCTTAC AGTGGCAAAA 180  
 ATAATGACAT GTAGCAAAGA TTTCAAAACA AAATATTTT NCCTTTGTA AA 232

SEQ ID NO:3282

LENGTH:158

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03854

SEQUENCE DESCRIPTION:

GATCGATGGT GGCCTTCT CCTGTGCCA CCCGTCTCA ATCTCTGTC TGCTCCCAGA 60  
 TGCCCTCTAG ATTCACTGTC TTTGATTCT TGATTTCAA GCTTTCAAAT CCTCCCTACT 120  
 TCCAAGAAAA ATAATAAAAA AAAAAACTTC ATTCTAAA 158

SEQ ID NO:3283

LENGTH:158

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03855

SEQUENCE DESCRIPTION:

GATCTCATCA CAAGATGACC AAAAGAGTTT GAACTGTGTG TGCTATTAG AAGATTTAAC 60  
 TTNATGTAT CTATAGATAC CACAGCTGTT GCTTCTAATA AATTTACCTA CCTTTNAACT 120  
 GAAAGTTAA TAAAGCCAAA TCAATTGAA ATACCAA 158

SEQ ID NO:3284

LENGTH:390

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03856

SEQUENCE DESCRIPTION:

GATCTGCCCT ACGTGCACTG TGGTGGCCGT GTGCTACGGC TCCTTCTACA ATCTCCTCAC 60  
 CCGAACCTTC CACATCGAGG AGCCCCGAC AGGTGGCCTG GCCAAGCGGC TGGCCAACCT 120  
 TATCCGGCGC GCCCGAGGTG TCCCCCCACT CTNATTCTNG CCCTTCCAG CAGCTGCAGC 180  
 TGCCGTTCT NTCTGGGGAG GGGAGCCCAA GGGCTGTTTC TGCCACTTGC TCTCCTCAGA 240  
 GTTGGCTTT GAACCAAAGT GCCCTGGACC AGGTCAAGGGC CTACAGCTGT GTTGTCCAGT 300  
 ACAGGAGCCA CGAGCCAAAT GTGGCATTG AATTGAATT AACTTAGAA ATTCAATTGC 360

2153480

TCAACTTGTG AGTGGCCACC TCTTATATTN

390

SEQ ID NO:3285

LENGTH:156

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03857

SEQUENCE DESCRIPTION:

GATCTCAACA CCTATGCCTC CACGTAATT ATTTCGA GCCTTATTTC CCTCAAATT 60  
GTAGAGTCCT AATCTCTTC TATCTGTGG TGTGAGACCT TGGATAAGTC TCCCTTCCAC 120  
CTTTCCAT TACTAAAAT GGTGAATTG CATAAA 156

SEQ ID NO:3286

LENGTH:155

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03859

SEQUENCE DESCRIPTION:

GATCAGGTGA TTTGAAAAT TGTATTTATC TGTACATGTA TGGGCTTTA ATTCCACCA 60  
AGAAAGAGAG AAATNATCTT TTTAGTTAAA ACCAAATTTC ACTGTTCAA NTATTTCCA 120  
ACTTATTAT TGGGTGTCA CTCAATTGCC CTGTN 155

SEQ ID NO:3287

LENGTH:137

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03860

SEQUENCE DESCRIPTION:

GATCTTGCAA CTCCATTCG GAAGACACCG AGGAAGAGGA GGAAGATGAA GACCAGGACT 60  
ACAGCTTCC TATATCTCCT ATTCTAGAGT GGTAAACTCT CTNTAAGTNT TCAGTGTGA 120  
CATAGCCTT GTGAAA 137

SEQ ID NO:3288

LENGTH:152

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03861

SEQUENCE DESCRIPTION:

GATCAGTGGG CACAGTTCTT CAGCTACATT GAGACCCCTGA AATAAACAAAT NATATTCTNA 60  
CTCGACATCT TGCCCCAAT CCTTCCAAAA ATATTGATGG TGATTTGTGC TACCATTAC 120  
TCGTTTATT AATAAGACA TTCAATCCCA AA 152

SEQ ID NO:3289

LENGTH:152

TYPE:nucleic acid

01111

2153480

TOPOLOGY: linear

CLONE:HUMGS03862

SEQUENCE DESCRIPTION:

GATCAGNATT GTACGTATT C AAGGTGTA AAT ATNTGATAAT TTGTCGTACA CGTACATTGT 60  
GCAATAACAG TCACAATNA A TTCCCTCAGCG CACCCATCAC CACGAATA CG ATACATTAGA 120  
TATTCTGAAC TTGCTCATCT TAGGACTTCA AA 152

SEQ ID NO:3290

LENGTH:153

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03863

SEQUENCE DESCRIPTION:

GATCATAATA GTGACCAAAA TATACATGCA GACTTGTTT TTATTATTGT TGTTTAAGCA 60  
TAATTTAAGA AAAAAAAATT TTACCTGGTG AACTTGCTAT CTGCTCTGTT TCTAGTTAAA 120  
ANATAATANA TNNTATCTNC CCTGTGCTGT AAA 153

SEQ ID NO:3291

LENGTH:144

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03864

SEQUENCE DESCRIPTION:

GATCTTCTT CTTTTACAG GAACAATTGG CTTCTTGCA TGCTTTGGT TTGTNACCAA 60  
AATATACAGT GTGGTGAAGG TTGACTGAAG AAGTCCAGTG TGTCCAGTTA AAACAGAAAT 120  
AAATTAAACT CTTCATCAAC AAAA 144

SEQ ID NO:3292

LENGTH:163

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03865

SEQUENCE DESCRIPTION:

GATCATGGTG AACTTACCAA AGCAAACAT GCCTGTAAGA TGGTCTGCA GCAGCCAACC 60  
AGTGAACCTCT TTTGGTGACA TCCTGTTCTT GTTGATAAC TTTATATTCC TATAAATCCA 120  
TTAAGGCCCC AATAAAGTTT GTCTCTAAC GCTGTGTTAG AAA 163

SEQ ID NO:3293

LENGTH:149

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03866

SEQUENCE DESCRIPTION:

GATCCAAAAT TAGAGCTCAT CAGANTTGTC ATTGAAAGTG TTAACAAAAG TAATATCAA 60  
TGACATTGAA AAAATATCCT TGTAAAATGA CTATATTAAT AGGTATAAGG NTTTCCTTA 120

01112

TTAATCTAAT AAAATNCCTT AATAGGAAA

149

SEQ ID NO:3294

LENGTH:157

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03867

## SEQUENCE DESCRIPTION:

GATCAGGACA CTTAGCAAAT GTAAAAATAA AATCTAACTC TCATTTGACA AGCAGAGAAA 60  
 GAAAAGTTAA ATACCAGATA AGCTTTGAT TTTGTATTG TTTGCATCCC CTTGCCCTCA 120  
 ATAANTAAAG TTCTTTTTA GTTCCAAATT TNAGAAA 157

SEQ ID NO:3295

LENGTH:148

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03868

## SEQUENCE DESCRIPTION:

GATCCGNTAG GAGTAGTAAA TGNGAGACAC AATNGCTTGA TTATACCTCN TATNTGGTTT 60  
 AGCTTCAGTA TTTAACAAAG GAAATAAACT TGAAAATTAT TTGTCATCAT AAAATGAAA 120  
 CAAANTAAA TATTATTGC CAGGNAAA 148

SEQ ID NO:3296

LENGTH:332

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03869

## SEQUENCE DESCRIPTION:

GATCTCAGAG GCTCAGAGAC TGCAAGCTGC TTGCCCAAGT CACACAGCTA GTGAAGNNCA 60  
 GAGCAGTTTC ATCTGGTTGT NACTCTAACG TCAGTGCTCT CTCCACTACC CCACACCGC 120  
 CTTGGTGCCTA CCAAAAGTGC TCCCCAAAG GAAGGAGAAT GGGATTTNN TTTTGAGGCA 180  
 TGCACATCTG GAATTAAGGT CAAACTAATT CTCACATCCC TCTAAAAGTA AACCTACTGG 240  
 TTAGGAGCAG CAGTGTCTC ACAGTGTGGG GTCAGCCGTC CTNCTTNATN NNNGGCCAAT 300  
 GGNNTATTGAC ACGTGTCNN NGTTGGCA GN 332

SEQ ID NO:3297

LENGTH:147

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03870

## SEQUENCE DESCRIPTION:

GATCTNCTGT CCTCCTTCA CTACATACCA ACAACCTCT GGCATTAAC TTCCAGTGAT 60  
 AGTGCTATNA ACTTTGTGTC CTCAGGTCAA CAAGGGACCT CAGTAATTNG TTCTNTACAT 120  
 AAGTATATAT ATGGGTATTA NTNNGTN 147

2153480

SEQ ID NO:3298

LENGTH:355

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03871

SEQUENCE DESCRIPTION:

GATCGCCCTC TACATGGCTT CGCAGCCCAA AAACAAATNA GTTAGGCTGC AGAGGA(TGG 60  
TTTGT(TTTT GGCATAAACC CTTTGAA(GT CTTTTTCAT TGTTAAATTAA AAATT(TTTT 120  
NTTNACTTGG ATGGCTTAAC ATTTTNCAA GAAAANTNGG AAGNTATGAA GATGNTGTTT 180  
TGGTTTGT(TT ATGAAANGCA TATGGCTTG CAGAGCTCAT TCGACAGTTA AGGCCATTGT 240  
TAAAGAAC(G GGTGCTTGC TCTGTGTTG TNCTCCTGAT TTCCCTGGAG GTTCTGGATG 300  
AGGGCTGANC ACAGGCTTNG TTANTGTNCA GTCTGTGCTG GGGGNCCCTCA GGGGN 355

SEQ ID NO:3299

LENGTH:147

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03872

SEQUENCE DESCRIPTION:

GATCACCAGG GTCAGTTNT TTAAATAATGG TTTCCA(ACTG GCCTAATACA TTAAGTAAGA 60  
NTGGNTGATA ACATGACCA(G ACAGACATAA AGACCCTGTT GGGAA(TNACA TTGAAC(TCTC 120  
AAAGTCAGA TTTNTTACAC AANTNTN 147

SEQ ID NO:3300

LENGTH:147

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03873

SEQUENCE DESCRIPTION:

GATCCGCTAC TAAAAGTAAA AATAACCGGT TTGTA(AACA TTAAGAGAAA AANTAGGATA 60  
TTAATACAT GTGGTGAGTG GAGANCAGGG TAAC(TTAAN TNAAAGTTA AGGCAAATTG 120  
TAAGCNCCAC AAGANATATC ANATTN 147

SEQ ID NO:3301

LENGTH:147

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03874

SEQUENCE DESCRIPTION:

GATCTAAAAA ATTAAAAAAG AAATATGAAT GAAAGNAAAA AAAATGCNA(A AATNAGCA(GT 60  
TTCCTGGAGG AGCAGTTCCA GCAGGGCAAG CTTNTGCTT GCNTCGTT(A AAGGCCGG(A 120  
CANTTTGGCC GAGCAGATGG CTATTN 147

SEQ ID NO:3302

LENGTH:147

01114

**2153480**

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03875

SEQUENCE DESCRIPTION:

GATCATNTTA TTTTACAATC ATTATAATG AATNAATGTT NCAGTTAGCT TTAAAAGGTA 60  
TACGGTGCTA ATNAGTAAAA TATTGAAGGC AATATTTAC TGCTAGCTTG CAAAGTTATG 120  
AGAGTTAAA AAATAAAATA TATGAAA 147

SEQ ID NO:3303

LENGTH:147

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03876

SEQUENCE DESCRIPTION:

GATCTAGGGT CCTGGGTNTC TTGCATTTAT ATGTCAGAAA AGGGCGATA TGCTGCTGAG 60  
GGGTGAGTGC ATATAANTNT GGCCCTGAGG ACCAGGGCTG GCAGATNTG TCTACCTGCT 120  
GAAGAATAAA ANATTCTTT TGGTAAA 147

SEQ ID NO:3304

LENGTH:150

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03877

SEQUENCE DESCRIPTION:

GATCTNACCC CCAGCATGAT TGTATTTCTT TCCCCTCCAG TCAAACCGTA ATACAGTTTC 60  
CAGAAAATTC GACAGTCTGC AATGCCAAA GGGTAAAAAT CTGTATTCA CAGTTGTATA 120  
GAATAAAGGC TTTAGTTAAA ATATTCAAA 150

SEQ ID NO:3305

LENGTH:146

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03878

SEQUENCE DESCRIPTION:

GATCTAAAAAA TAACTGTAAT TATTTAAATG ACTAANAGGA AAGTACATTT TTTAAAATNC 60  
TGAAAATTC CTTNNNTGTGT TTATNCAAAC TGAAAAGCTG AGACCAAGAG CAAGGAAGGT 120  
AAAANGTTAA CAGGCAAACA TTTNCN 146

SEQ ID NO:3306

LENGTH:143

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03879

SEQUENCE DESCRIPTION:

GATCCTCACCA AACCTAACGCA AGAGGAAGTG CCCCTCTCAA CCTGTGCGGG NTGCTGCGTC 60

**01115**

**2153480**

CCAGGACTGA GACGCAGGCC AGCCCCGGCC CCTAGCCCTC AGGCCTTCTT TNTTATCAA 120  
ATAAAATATT CTTAATAAGG AAA 143

SEQ ID NO:3307

LENGTH:143

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03880

SEQUENCE DESCRIPTION:

GATCAACAAG AGCACTGTAC TCCTGGCAAT NATTACATAT GTNAGAACAT GGATTTGCA 60  
CTGTAGACAA CATTAAACAC CAGTCTATGG GGTACTGCAT TGCTTTNAT AAAGTCAAA 120  
ATAAAAGATT ATTTCAAAC AAA 143

SEQ ID NO:3308

LENGTH:142

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03881

SEQUENCE DESCRIPTION:

GATCCCTTA CTGGAGCCC GTATGTGCTG TGTGAGTTAG AAGTCATTCT TGCTGAGAAG 60  
GTGAATAGGT AGGGATTTCG CTTGTTTGT AAGTCTACAA TTTGCCAAGA GTAAATAACA 120  
CTGGACCAGC TGTAAAAGTA AA 142

SEQ ID NO:3309

LENGTH:142

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03882

SEQUENCE DESCRIPTION:

GATCTGCACA TTTAACCGTG GCTGTTCTG TATAGCCTAT ACTGCATTAG CCNAAGANAT 60  
TGTTGCTTG TAACTTTTG CACTATTGTT TTGGCTGGAT TTGTATTACA CACAGTTTA 120  
AAAAAAACAA TTCCACACTA AA 142

SEQ ID NO:3310

LENGTH:141

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03883

SEQUENCE DESCRIPTION:

GATCCCTAAG CCCCCCAGCT GTAAATAGGC TGTGGCCAGT GCCTGGTCAT NAGAAGAGNG 60  
AGGAGGAGCC CAGGCCTCTG TTTATGTATT TATTTATTAA TTTATTATAC CTATTAATAA 120  
AAAAGGTGCT CAGCCTCCAA A 141

SEQ ID NO:3311

LENGTH:139

**01116**

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03884

SEQUENCE DESCRIPTION:

GATCTTGGCC TTTCGCACTGC CCAGTGATGG CATTACTCTG CACTATAGCC ATTTNCCCCA 60  
ACTTAAGTTT AGAAATNACA AGTTTCAGTA ATAGCTGAAC CTGTTCAAAA TGTTAATAAA 120  
GGTTTCGTTG CATGGTAAA 139

SEQ ID NO:3312

LENGTH:138

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03885

SEQUENCE DESCRIPTION:

GATCTGGAAG ACAAGTAACA TCTTCCTTT NTTGGTGCTC GCCTGCCGTG CTCTAGGTGC 60  
TTTTAGAGAT GCTGGTCTGT GTGCTAGGGA AGCGATGAAC CATACTGTTA GTCTATTAAA 120  
CATAACTCAA CCTGGAAA 138

SEQ ID NO:3313

LENGTH:138

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03886

SEQUENCE DESCRIPTION:

GATCTATCTC TGTGTCCAAG TCTCCTCTT TTATAAGGAA ACCAGTCATA ATGGACCCAC 60  
CTGAATNACC TCATTTAAC TTGATTACCT CTGTAAAAAA TGTATTTCCA AATAAAAGTGA 120  
CCTTATGAGG TATTGAAA 138

SEQ ID NO:3314

LENGTH:136

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03887

SEQUENCE DESCRIPTION:

GATCAACAAA TCTCCTAGGC CTNTNACCAC ATACATTTAC ACCNACTACC NCAACTATCC 60  
ATAAAATCTAA GTATAGCCAT TCCACTATNA GCTGGAGCCG TAATTACAGG CTTCCGACAC 120  
AAACTAAAAA GCTAAA 136

SEQ ID NO:3315

LENGTH:139

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03888

SEQUENCE DESCRIPTION:

GATCCCACCT TCAACACCTT ACAAGTAAAG CCAATGAAGN ACAGTTGAAA CATGCAAAAT 60

01117

2153480

ATGGNGCTT TCATGTAATT ACTCTTTAC TGTTTACCAT TCACTATAAT TCACAATTAA 120  
AATTGTGTGN CTANACAAA 139

SEQ ID NO:3316

LENGTH:133

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03889

SEQUENCE DESCRIPTION:

GATCTGTGTA GTTAATGTAT TTATTAATGC TTGACTTTA AAATCCTGGG CATAAATAGT 60  
GCAGAGCCTC GTATGTTGT CAGTTCATGC CGAGATGAAA TAAATCACGC AGAAAGTGCC 120  
AGTCCTCCTG AAA 133

SEQ ID NO:3317

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03890

SEQUENCE DESCRIPTION:

GATCTGTGGA GTGTGTGTTT CAAAGAGAGA ACTACAGAAA TNTAAAGCA GGAAAACCTG 60  
AATGTNATGT GCACATTTC ATCCCACATG GACAATGTAT GTGTTTAAT AAATGGAATT 120  
TTCAGATTCA AA 132

SEQ ID NO:3318

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03891

SEQUENCE DESCRIPTION:

GATCAAATGT GGGCCCGTTT TTGGCCGCCG CGGCCCTGCC CGTCCCTNC GGCCACCACC 60  
TAATTANTTG CCGTGCTTCC TGCTGCTGTA ACTGCTTNT TACCTTCCA ATAAAGANTT 120  
TCTTGGTTA AA 132

SEQ ID NO:3319

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03892

SEQUENCE DESCRIPTION:

GATCATTATT ATTGTAATAG TCTCATGTTT AAATGGGATT ATATAATGAN AACAGTTAA 60  
AGAAAATNAT AATCTTATAT NTCAAATGTG GATGCATATA ACCTGTNAGT GAAAANCAC 120  
TGANTGATT AN 132

SEQ ID NO:3320

LENGTH:131

01118

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03893

SEQUENCE DESCRIPTION:

GATCATATTG CTGTAACCTC TTTAAGTAG TTGATGTGGA AACATTAA AAGTGAATT 60  
NTCAAAATNC TGGTTTGTC TTTATCCAA CTTTGTGCA TATATATAAA GTATGTCATG 120  
GCATGGTTAA A 131

SEQ ID NO:3321

LENGTH:131

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03894

SEQUENCE DESCRIPTION:

GATCCTCAGT GTAGTTCTGA AACTAAGACT ATAGATATTN NNTTCTTT AATTCTCTT 60  
TATACTAAAG AATCCAGAGT TGCTACAATA AAATAAGGGG AATAATAAAC TTGAGAGTGA 120  
ATAACCATAA A 131

SEQ ID NO:3322

LENGTH:131

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03895

SEQUENCE DESCRIPTION:

GATCTTAGAG TTTGCACAGC TAAAAAAAAT GGAAATATTG GAATCTGAAT CCAAAACAGC 60  
CTGACTAAA ACAATGTNCT TNCCATTATG CAAGGGAAAA AAAAANGGT TGGGTNTCAG 120  
NGNGAGGGTA N 131

SEQ ID NO:3323

LENGTH:433

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03896

SEQUENCE DESCRIPTION:

GATCATAGTC TTAGGAGTTC ATTAAACCA TAGGAACCTT TCACTTATCT CATGTTAGCT 60  
GTACCACTCA GTGATTAAGT AGAACTACAA GTTGTATAGG CTTTATTGTT TATTGCTGGT 120  
TTATGACCTT AATAAGTGT AATTNTGTAT TACCAAGCAGG GTGTTTTAA CTGTGACTAT 180  
TGTATAAAAC CAAATCTGA TATCCAGAAG CACATGANGT TTGCAACTTT CCACCCCTGCC 240  
CATTTTGTA AAACTGCAGT CATCTTGGAC CTTTAAAC ACAAAATTAA AACTCAACCA 300  
AGCTGTGATA AGTGGAAATGG TTACTGTTA TACTGTGGGT ATGTTTTGN NTTACAGCAG 360  
GTTAATGCTT TCTTTCCA GGTCGNCCCT TGAGGATTNA GGGAAAATTA NATAACTCTT 420  
TGTACAGTTC AAA 433

SEQ ID NO:3324

LENGTH:129

01119

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03897

SEQUENCE DESCRIPTION:

GATCCACCCA CCTCGGCCTC CCAAAGTGCT GGGATTATAG GTGNNAAGCCA CCGGCCGGG 60  
CCGGTTGCTG GCATCTTAAT GTTCTGTAGG TGGAATATT CCAATAAACAA CAAGGTGCCG 120  
TAATTGAAA 129

SEQ ID NO:3325

LENGTH:129

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03898

SEQUENCE DESCRIPTION:

GATCTGGTAA ACTTNAATC AATTAATTA ATGCANCAAT AGATTATNAAT TATTAACGTGA 60  
CCATTTAAGT TTTTNAATAA GTTTTTACA AAGAAAAGTT AACATTAAGA AAGAATTACA 120  
GCTTCAAA 129

SEQ ID NO:3326

LENGTH:128

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03899

SEQUENCE DESCRIPTION:

GATCTGGAAA TTTTTAATC AGTTAAATTG TGCAAGCAATA GATTTTAAC TTAACTGAC 60  
CATTTAAGTT TTTNAATAAG TTTTTACAA AGAAAAGTT AACATTAAGA AGAATTACAG 120  
CTTTCAAA 128

SEQ ID NO:3327

LENGTH:127

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03900

SEQUENCE DESCRIPTION:

GATCCTGTAG TGCCCTCTATA GAAGTACCCA CAGAAAGTAA AGTATCACAT TTATAAATAC 60  
CAAAGATGTA ACAATTTAA AATTTNTAG ATTACTCCAA TAAAGTGTAA TAAGTTTCC 120  
TATGAAA 127

SEQ ID NO:3328

LENGTH:131

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03901

SEQUENCE DESCRIPTION:

GATCCATCGC GATACTATGT GTGCATTATT TGAAAGTTAT TGAAATTT ATTCAAACCG 60

01120

2153480

TGGAACAAAT GTATGTNATT TTTTATACT TCTTAATTAA AATAAAATAT TTAATGCACT 120  
ATTAAAATAA A 131

SEQ ID NO:3329

LENGTH:123

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03902

SEQUENCE DESCRIPTION:

GATCAGCCCT TTGTACAGAA AAATGTGTCT ATAAAAATTAA TGTGTTATTT AATTCTGATA 60  
CTTTTGCGCT TGAAATAGC TTCTTGAAC TTTTACAATA AAAATGTTT AGAAACTGTT 120  
AAA 123

SEQ ID NO:3330

LENGTH:123

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03903

SEQUENCE DESCRIPTION:

GATCATGACC GGAACATGGN CTGGGTTCC ACCCAGCTCC AGGCCACATG CAATGTCCAC 60  
AAGTNTGCCT TCAATNACTG GTTCAGTGGA CACCTCAACT TCCAGATTGA GCACCATCTN 120  
NNN 123

SEQ ID NO:3331

LENGTH:205

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03904

SEQUENCE DESCRIPTION:

GATCGATTCA ATGCCCGATG CTTCTGTTTC ATTCCCGACC CTTTCTACTA TGCAATTCCC 60  
TTTTATCAGG TGTATAAAGT TAAATACTGT GTATTTATCA CTAAAAAGTA CATGAACCTTA 120  
AGNGNAAACT AAGCCTTCG TGTTTTCCA NAGGNCNGCN NGGCTTCTNT GTACAGTTGG 180  
AATAAACAGA CAGCAAAATG GTAAA 205

SEQ ID NO:3332

LENGTH:122

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03905

SEQUENCE DESCRIPTION:

GATCCTCAGG CGGCCCCCAC CAGGGCACAC CCTACTGTCC TTGTGCCTCA CGCCCCCTCC 60  
TCATCCTGCA CCCCTCCAT CCCACCTTCC CTTCAATAA ACAGCTGGGA TGGATACTGA 120  
AA 122

SEQ ID NO:3333

01121

2153480

LENGTH:120

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03906

SEQUENCE DESCRIPTION:

GATCTGATTT TTTCCCCCTT TACCTAGCTG TGCCCCCTCT GGTTATNTAT TTCCCTTAGTG 60  
CCAGGAGGGC ACAGCAGGGG AGCCCTGATT TTAAATAAAT CGGAAATTGT ATTTATTA 120

SEQ ID NO:3334

LENGTH:119

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03907

SEQUENCE DESCRIPTION:

GATCACCAGT GCATCCTTCA TCACAGCATG TGCAATATGC CAAGATTACC CTGGTCATT 60  
CCTGTCAACA AGGGGTCAAT GTCATAAATG TCACAATAAA ACAATCTCTT CTTTTAAA 119

SEQ ID NO:3335

LENGTH:119

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03908

SEQUENCE DESCRIPTION:

GATCCATGAG GAAAAGATGC TCTCCCACCT AAGGCCAGGA ATCTGAGAGC AGGACTGGCT 60  
GAGCTCCAG GGCAAGGGGT TCACTAATGC TTATCAATAA AGAATATTGA GCCTGGAAA 119

SEQ ID NO:3336

LENGTH:273

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03909

SEQUENCE DESCRIPTION:

GATCAGATTG CATGTNACTC TNAAGCTGAC GAACTTCCAT GGCCCTCATT AATGACACTT 60  
GTCCCCAAAT CCGAACCTCC TCTGTNAAGC ATTGAGACA GAACCTTGTT ATTTCTCAGA 120  
CTTTGGAAAA TGCATTGTAT CGATGTTATG TAAAAGGCCA AACCTCTGTT CAGTGNNNNT 180  
AGTTACTCCA GTGCCAACAA TCCTAGTGCT TTCCCTTTTN AAAAATGCAA ATCCTATGTG 240  
NTTTAACTC TGTCTNCACC TGATTCAACT AAA 273

SEQ ID NO:3337

LENGTH:119

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03910

SEQUENCE DESCRIPTION:

GATCACCATG AACAAAGNTA TATTCCTAT TTATTTATTA TATGTGCACT TCAAGAAGTC 60

01122

2153480

ACTGTCAGAG AAATAAAGNN TTGTCTAAAT GTCATGTTGG AGATNCCTT GCATNCTTN 119

SEQ ID NO:3338

LENGTH:118

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03911

SEQUENCE DESCRIPTION:

GATCAGGACT TCAAGGGCCA GACCACAGAC TACTTATAGG AGCATCTTCA AGCGGGTCAC 60  
AGTAAAAACC TTGAAATGGC CTTTTNAAT ATATATAANT AANTGTNAAT ATTATTNN 118

SEQ ID NO:3339

LENGTH:118

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03912

SEQUENCE DESCRIPTION:

GATCCAAATN ATGCCACAG ATGAACCTTCC ATGCAAGCNA TGGCTGAGTT TCATTGCTTA 60  
AAATNCTCCT CTGTTAGAG GGGCCTGGTA GAAATAAAA CCCACCCAT ATCTTAAA 118

SEQ ID NO:3340

LENGTH:118

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03913

SEQUENCE DESCRIPTION:

GATCCTCCTG GCCGCCCGC AGGTCTNTGG AAGGGCTGGA CGGCAAGTCC GTNTAGCTCA 60  
CGGGCCCCCTC CAGTGGATG GNTCTTCCG GTGGAGATAA AAGTGATTT NCTCTAAA 118

SEQ ID NO:3341

LENGTH:351

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03914

SEQUENCE DESCRIPTION:

GATCCCAGGT GCGTGTNTCT CTGTCCTC TAGCCCCCTCT CTCACACATC ACATCCCCAT 60  
GGTGGCCTCA AGAAAGGCC GGAAGGCCA GGCTGGAGAT ANCAGNCTCT TNCCCGTCGG 120  
CCCTGCCTCG GCCCTGGGT ACCATGTGGC CACAACGTGCT GTGGCCCCCT GTCCNNAAAGA 180  
CACTTCCCCCT TGTNTCCCTG GTTGCCCTCTC TTGCCCCCTG TCCTGAAGCC CAGCGACACA 240  
GAAGGGNGNG GGGCGGGTCT ATGGGGGAGA ANGGGAGCGA GNTCAAGAGG TGGGCATGGG 300  
TTTGGNAAGG GTNGGCCTT GGGGGCCTN TNATGNTGGC TTTTCAANC N 351

SEQ ID NO:3342

LENGTH:117

TYPE:nucleic acid

01123

2153480

TOPOLOGY: linear

CLONE:HUMGS03915

SEQUENCE DESCRIPTION:

GATCATGGCG CTGCACTCCA ACCTGGGCAG CAGTGCAAGA CTCTGTCTCA AAAGGGAAA 60  
AAAAAAAANT TNCTGATGTG NCCCATGAAG GGACCTCATT TNCCTGNAA TTTTGGN 117

SEQ ID NO:3343

LENGTH:116

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03916

SEQUENCE DESCRIPTION:

GATCGGCCGT ACCAGCCGCC CGGCCCGCCG GTGGGCGCTC TCGGACTACT CGCTGTACTT 60  
GCCGCTCTGA GTCAGTGGCC CCTTCGTTCC TTGTAAATAA ATCCCGCCCC CGGAAA 116

SEQ ID NO:3344

LENGTH:116

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03917

SEQUENCE DESCRIPTION:

GATCCAGACA AGTGGGAGAG CCCGTGGGGG CAGGGGACCT GGAGCTGCCA GCACCAAGCG 60  
TGATTCTGC TGCCTGTATT CTCTATTCCA ATAAAGCAGA GTTGACACC GTCAAA 116

SEQ ID NO:3345

LENGTH:116

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03918

SEQUENCE DESCRIPTION:

GATCTCATAA GAAATGTAAT ATGAAATAA TATCTTGCTT TATGTTGAA AATATACATT 60  
GTTTGCNCTA GAATAGAAAT AATTCTTT CAATAAAAAG AAAGAAGGAC TCTAAA 116

SEQ ID NO:3346

LENGTH:116

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03919

SEQUENCE DESCRIPTION:

GATCGTTGTG TTGTTATTT ACTGCACTTT TTACTTTTT NC GTGTGGAG CTGTATTCCC 60  
GAGACCAACG AAGCGTTGGG ATACTTCATT AAATGTAGCG ACTGTCAACA GCGAAA 116

SEQ ID NO:3347

LENGTH:116

TYPE:nucleic acid

01124

2153480

TOPOLOGY: linear

CLONE:HUMGS03920

SEQUENCE DESCRIPTION:

GATCAAGGCC AAATAACCCG ATTGGTTTG GGCACCTCAAG CAATAGTAAA GCCTGTAAGA 60  
CATGATAGGA TTATNTTCCC CTTTGGATT AAATNTAATA TAGCAGTTGG ATTAAA 116

SEQ ID NO:3348

LENGTH:115

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03921

SEQUENCE DESCRIPTION:

GATCCTGTAG ACCCTTCCTT TTGGCCAATT TCCCCCTTT TGGAATGGAA ACATTACCC 60  
AATCCCTATA CCCCCATTGT ATCTTGGAAAG TAAATAATTG TTTTGATT TTAAA 115

SEQ ID NO:3349

LENGTH:115

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03922

SEQUENCE DESCRIPTION:

GATCTCTTCA CTGTAAAAG TTGCCCCGGT GCAGCGCCTT TCCCTTCTAN CATGGAAAT 60  
GCAGGCTGGG CCCTTGGGNT NAGCCTGCAG GGCTCTGGTG CTGTCCCCGA CCCNN 115

SEQ ID NO:3350

LENGTH:113

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03923

SEQUENCE DESCRIPTION:

GATCCACTGT TTGCAGCAGA ATTATATATA TGTATAGGAA AAATCCACTT TGAATAATCC 60  
ATGTTTGTA TTTGGAAATT GTTTTAAAAA ATAAAAAGGA AAGGAAATAT AAA 113

SEQ ID NO:3351

LENGTH:113

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03924

SEQUENCE DESCRIPTION:

GATCTAGGCA GTGGGTTAAC CGAGACCCCT AAAAGTGACC CTTTCCCTTT CTGCCCTATT 60  
CTNCTNAGAC CCTCAGAAAG NNNTCCAATT TTTAAAATC CCTGTAGCTC CAN 113

SEQ ID NO:3352

LENGTH:117

TYPE:nucleic acid

01125

2153480

TOPOLOGY: linear

CLONE:HUMGS03925

SEQUENCE DESCRIPTION:

GATCTGATGA ATTGGTTTT GAATCCCAGA AANGGTCTGC CATGGAGTTG GCAGTCATCA 60  
CGGTAGATGG CGTATGATT TCCTGAATT TAAATAAAAT GAAAACCATA AATTAAA 117

SEQ ID NO:3353

LENGTH:112

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03926

SEQUENCE DESCRIPTION:

GATCAGAGCT GTTAGGTTAA GGCTTAACCA CCTCCCTGCA GNCTCTTAAN TCTCAAGCTT 60  
TAGGAACCCA TTTCTAAANG TACACTAGCG GAGANTTTAT ATTGTCAAGCC NN 112

SEQ ID NO:3354

LENGTH:111

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03927

SEQUENCE DESCRIPTION:

GATCACGGTA CGTCCATAAA GCCAGTATTA CACTAAATN NAGTATTCTT TTTTGTAATC 60  
GTTTTTTTA GAAGGTAAAC AAATTTAATA AAGCTACCAA TAATGTTGAA A 111

SEQ ID NO:3355

LENGTH:111

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03928

SEQUENCE DESCRIPTION:

GATCTAGAAA NTGCCCTCCT TATACCCCTA CCATGAGCCC TACAAACAAA AAACCTGCCA 60  
CTAATAGTAT GGTCATCCCT CTNANTAAAN CATCATCCTG GCCCTAAGGN N 111

SEQ ID NO:3356

LENGTH:111

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03929

SEQUENCE DESCRIPTION:

GATCTTGCA ATTNAAGGNT TAGGCCACGTG GCTTGCTTCGA GCNAGTAATG TGAATGGAAA 60  
TAACGTGTAT CANTGCTGGA TAGAAAATT AANAGCCAAC ACATGGTTCC N 111

SEQ ID NO:3357

LENGTH:110

TYPE:nucleic acid

01126

2153480

TOPOLOGY: linear

CLONE:HUMGS03930

SEQUENCE DESCRIPTION:

GATCCCGTAG AATATATATT TAATAATCCC ACAAACGGAG GCCAGACTTC TGCCTTAAC 60  
TCAGTAACAC AAGCTTCTTT AAGCCAAATA CATCACTTGC CACTACCAA 110

SEQ ID NO:3358

LENGTH:110

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03931

SEQUENCE DESCRIPTION:

GATCTCCGTG GTGGTCGTGG GCCGCCAGGT GAATNANCCC CACATCCGN TCCTGGTCAC 60  
CGGCAAGACG GCCGAGTACG ACGTGGCCTA CGGGAGAGC ACCTNTNNCN 110

SEQ ID NO:3359

LENGTH:115

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03932

SEQUENCE DESCRIPTION:

GATCCTTCGA AGCACTCAGT TCACTCTTCC CCACCACAGT GGTTAAAAGG CGTTTGATC 60  
TGCCACTATG TGTGTGTTT AAAATAANCT TTTGGAAACA TGTTGGNGN GNAAA 115

SEQ ID NO:3360

LENGTH:214

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03933

SEQUENCE DESCRIPTION:

GATCCACTAA TGTAGCTTAA GGTTATTAGN TTTGGGCTTT TAATCATGGN ATAATCTTAT 60  
GTATTGGTGT AAGAGTTGAT GAATGACTTT AGCTGTGTGA ATATATAATA GTCAAACGTGC 120  
AACACATTTG CATCCCTTT GTGACCTAAT TTACAGNCAT TTAAATTGTG TTGCAGTTCT 180  
GCTTTGCCGT TTAATAAAAA GCTATTCAG NAAA 214

SEQ ID NO:3361

LENGTH:110

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS03934

SEQUENCE DESCRIPTION:

GATCANAGAT TTCATNACA GTGCAGGAAA GCAGCACTGA GAAACTTTA ATTGTNTNA 60  
ATTTCTNCTT TAATGTCAC ACCACCAT CCCATTAC TTTAATTNN 110

SEQ ID NO:3362

01127

2153480

LENGTH:108

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03935

SEQUENCE DESCRIPTION:

GATCTCCCC TGACCTGCTC CCAGGGCTAT AACAGATAACG GACTTGAAA CTGTATGGAG 60  
TATAGAGCAG TGCTCTATAA TTTAAAATAT ACATATATTG CAACCAAA 108

SEQ ID NO:3363

LENGTH:363

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03936

SEQUENCE DESCRIPTION:

GATCTTCAGC TTGGTAGATT TAATTGCCCA GTGAATGGCA CTTACGTTT CATTTNNAC 60  
ATGCTAAAGC TGGCAGTGAA TGTNCCACTG TATGTCAACC TCATGAAGAA TGAAGAGGTC 120  
TTGGTATCAG CCTATGCCAA TNATGGTGCT CCAGACCATG AACTGCTAG CAATCATGCA 180  
ATTCTTCAGC TCTTCAGGG AGGCCAGATA TGGTTACGN C TGACAGGGG AGCAATTNT 240  
GGAAGTAGCT GGGAAATATT CTACGGTTTC AGGCTATCTN CTTTTATCAA GGTTGAATG 300  
TCAGTNCAGT NTTTGACNAC TAAAAGGNNT NGGGGTNCTA ATTANGTNGG GTTTGAAGGG 360  
TAN 363

SEQ ID NO:3364

LENGTH:106

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03937

SEQUENCE DESCRIPTION:

GATCTGGGGA GTNTNAGGAG AGGGTGGCAT CAGNAGCTGC TCAGGCTTGG CGGAGGGAGC 60  
GGCATGGCG ATGTCACTCA GCCCCTTCCC GGTCCGCCCN NTTCCN 106

SEQ ID NO:3365

LENGTH:105

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03938

SEQUENCE DESCRIPTION:

GATCGTTTT TCCAGAGTCG CGGGGACACA GGAGTNTCC TACAGTACAT NCACGCCCGC 60  
NTCCACAGTT TGGAAGAGAC TTTGGATGT GGGTACNTGA NTGAN 105

SEQ ID NO:3366

LENGTH:105

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03939

01128

2153480

SEQUENCE DESCRIPTION:

GATCATCTAA AAAATGCCAT GANTGGAAAT NCGAAGGCC AGACACCAAT ATTCNTAGA 60  
AGTAAACAGC TCAAAGACAC TCTCCTATCT NAGGAAATNA ATGTN 105

SEQ ID NO:3367

LENGTH:104

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03940

SEQUENCE DESCRIPTION:

GATCCAGTGG GGTCCGGACA CTGGGGCCCCG CAGCGAAAGC ACGNTCCAGC CACCAGGAGG 60  
CCACCTATTN TTCAAAAATA AAGACTGCCT TCCTCTCTTG GAAA 104

SEQ ID NO:3368

LENGTH:104

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03941

SEQUENCE DESCRIPTION:

GATCAAAAAA GAAGAGTTAA AACAAACACAT GTAAATNCCT TTTAATATTT NATGGGAATG 60  
CCTCTCATTT AAAAATAGAA ATAAGCATT TTGTTAAAAA GAAA 104

SEQ ID NO:3369

LENGTH:104

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03942

SEQUENCE DESCRIPTION:

GATCCTTAT CTTTCCATAT GGACACCGTA AGAAAGTGT TTTCTACTAT TAATATTAAA 60  
TTAAACCTT TACTNTGTA TAATAATNA AAACTCAGAA TAAA 104

SEQ ID NO:3370

LENGTH:104

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03943

SEQUENCE DESCRIPTION:

GATCTGGAAG AGGCTTGTA CCTGAACAT TATGTAGGAA GGCAGTACNA NCAGCCCACC 60  
AGTGTAACTCT CCCTGNATTA AGGCATTCTT AAAAACTTAG GCNN 104

SEQ ID NO:3371

LENGTH:104

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03944

01129

2153480

SEQUENCE DESCRIPTION:

GATCCGCTCT GGTCAAACCC TTCCAGGCCA GCCAGAGTGG GGATGGTCNN TNACCTGCTG 60  
GGAAGGCANN CTGATGGGGC ACACCCTGG CCTCTCGTCC ACGN 104

SEQ ID NO:3372

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03945

SEQUENCE DESCRIPTION:

GATCAAAATT TTTTGATAAT TTAAAAATTG TGTGTGATTN TNAAATTNA AGAAATTGCT 60  
GAAAACCTAG AAAAATATAA TGGTATACAT ACAATAGNNA AA 102

SEQ ID NO:3373

LENGTH:105

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03946

SEQUENCE DESCRIPTION:

GATCAATAAT TTAAATGTAA CTAGTTGGGA TTTTATAGTT AAAATNATAT TTGTGTATAT 60  
AACATAACTA ATCTGTAAAT NGTAATAAAAT ATATTTNCAA TTAAA 105

SEQ ID NO:3374

LENGTH:99

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03947

SEQUENCE DESCRIPTION:

GATCATTAG TACTTTGTN TTCTCCCATG TGCTTGAAGG AAAAATAAAG TGTCACTACC 60  
GTATTTNTG TTTTCATCAA AAAATAAAA TAATTTAAA 99

SEQ ID NO:3375

LENGTH:97

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03948

SEQUENCE DESCRIPTION:

GATCTTTAGC ACAGTGATAT NACCATGACT TCACAGACAT GGTCTAGAAT CTGTACCCCT 60  
ACCCACATAT GAAGAATAAA ATTGATTAAA GGTTAAA 97

SEQ ID NO:3376

LENGTH:97

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03949

01130

**2153480**

**SEQUENCE DESCRIPTION:**

GATCAATAAT AATNAGGAAA GCATGATATG TATATTGCTG AGTTGAAAGC ACTTATTGGA 60  
AAANATTTAA AGGCTAACAT TAAAAGACTA AAGGAAA 97

**SEQ ID NO:3377**

**LENGTH:94**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS03951**

**SEQUENCE DESCRIPTION:**

GATCCCCCTC CTTCCCCCTC TCCCCATTGT ATTTATTTGC CTGCTGGAAA ATNACATCCG 60  
GAAATAAAAT AGAAATATGT CTTTNATTT TAAA 94

**SEQ ID NO:3378**

**LENGTH:93**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS03952**

**SEQUENCE DESCRIPTION:**

GATCCTAAAC TTTTGGATA ATCTTTATA TTTNTAACCT TTGAATTAA TCATTGTNCT 60  
NAGATTAAAA TAAAANATGC TATTGAAACT AAA 93

**SEQ ID NO:3379**

**LENGTH:91**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS03954**

**SEQUENCE DESCRIPTION:**

GATCTGGAAA TCCCTGCTGT AATCTTTTA AGGGAATCCA CTGGAAATAA TTGTTTTG 60  
TTTAAATAA AACCAATTCT TACTTAACAA A 91

**SEQ ID NO:3380**

**LENGTH:91**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS03955**

**SEQUENCE DESCRIPTION:**

GATCTATGGC CTCTGGTGT TTGCTCTGTA TTGGTTAA TTTTTTGTC CTAATCTTT 60  
CAATCAATAA AATTGTGCGT ATTAACTAA A 91

**SEQ ID NO:3381**

**LENGTH:91**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS03956**

**01131**

2153480

SEQUENCE DESCRIPTION:

GATCAACTNA ATGTTAAGA CTTAGATGT CTTGTATTAA AAATTACACA AAAAAAGTAA 60  
AACTTTTAT ACTTACCCCTT TTAACTCTAA A 91

SEQ ID NO:3382

LENGTH:90

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03958

SEQUENCE DESCRIPTION:

GATCTCTGTA ATNTTATNTA GAGTTTGAGC TGAAGCCCCG TATATCTAAT NTATTTGTT 60  
AACATGAAA GTGCATCCCTT TCCCTCCAAN 90

SEQ ID NO:3383

LENGTH:88

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03959

SEQUENCE DESCRIPTION:

GATCATACCT ATAAAATAA TGCCAAACAC CAAATATGAA TTTNATGATG TACACTTGT 60  
GCTTGGCATT AAAAGAAAAA AACACAAA 88

SEQ ID NO:3384

LENGTH:88

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03960

SEQUENCE DESCRIPTION:

GATCAAGAAG ACNNNTAAGG GAAGAACGTA CACAGTAAA ANCCAAAAAA AGAAAAAAAT 60  
GTTTATACAA CCCTAAGTCA ATAACCTN 88

SEQ ID NO:3385

LENGTH:87

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03961

SEQUENCE DESCRIPTION:

GATCTAGGCA CACCTNGCTC TTNGCTGCAT GTGGTTATNA ACANCTTCCA GTGGAAGTCG 60  
AATAAACAGT TTTGGTAAA TCTCAA 87

SEQ ID NO:3386

LENGTH:85

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03962

01132

2153480

SEQUENCE DESCRIPTION:

GATCCTGCC TGAATCTCCA TAGTCTCCAC TGTGAAC TGA GGAGGGGAGG GGTGTGCTGG 60  
GGAATAAATC TTGTATGAGA ACAAA 85

SEQ ID NO:3387

LENGTH:84

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03963

SEQUENCE DESCRIPTION:

GATCCATT A NAGGCCAAAT NTCAATTCTGC AGGTGCCTTC CCGATGGATT AAAGGTGCTT 60  
ATNTTTTTT AAGTTTNAAG TAAA 84

SEQ ID NO:3388

LENGTH:81

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03964

SEQUENCE DESCRIPTION:

GATCGTGTTC ATTTGNNTT CCGATTCTAG ATATAAGTTT TGNATGGCA GGAAGACTAA 60  
AATAAAAGTT TTTAAGGTAA A 81

SEQ ID NO:3389

LENGTH:81

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03965

SEQUENCE DESCRIPTION:

GATCTCCAGA TGTAATTCC CCTCTTTAAT TTAAANTAAAT NTAAAGATTA CTAAAACAAT 60  
AAAANCTCCT AAAAANTCAA A 81

SEQ ID NO:3390

LENGTH:88

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03966

SEQUENCE DESCRIPTION:

GATCTTCTT TCCAAAACAT TTCTGGACAG TACCTGATTG TATTTTTTT TTTAAAATAA 60  
AAGCACAAGT ACTTTNGNGN TTGTTAAA 88

SEQ ID NO:3391

LENGTH:76

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03967

01133

2153480

SEQUENCE DESCRIPTION:

GATCCCCCCA CAGCCCTGG TCAGTCTGCC CTTGTCACTG GTCTGAGGTC ATTAAAATTA 60  
CATTGAGGTT CCTAAA 76

SEQ ID NO:3392

LENGTH:78

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03968

SEQUENCE DESCRIPTION:

GATCACAAATC ATTTGAATC CCTCTTCCTC ACTTTTTTT CTAAGAAAAT AAACATTTA 60  
CTGTTTTAT GGAATAAA 78

SEQ ID NO:3393

LENGTH:73

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03969

SEQUENCE DESCRIPTION:

GATCACAGCT GACATTACA AAATATTTT NTACCTTAGA ATTTCTGCAT TAAATAAAAT 60  
ATTTGTTT AAA 73

SEQ ID NO:3394

LENGTH:68

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03971

SEQUENCE DESCRIPTION:

GATCTTTGC TAATGCAATT AGNATTATGT TTTGCATGTA TGACTTAATA AATCCTTGAA 60  
TCATAAAA 68

SEQ ID NO:3395

LENGTH:67

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03972

SEQUENCE DESCRIPTION:

GATCCTCTAA ATNTGGAATT TTGATGTAAT AACTGCTAAT AAAATNATAT TGAAACTGTT 60  
TTATAAA 67

SEQ ID NO:3396

LENGTH:65

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03973

01134

2153480

SEQUENCE DESCRIPTION:

GATCAAAGCC CGGAAAGGCA AATGAAGCNT CATGTGAGT GTAATAAAGN TGTCTGCTGT 60  
TCAAA 65

SEQ ID NO:3397

LENGTH:65

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03974

SEQUENCE DESCRIPTION:

GATCGAACCC TGTGAAAT GCTACCAAAT GGCAAAAAGC AACAAATAAAC AGTTTGATT 60  
TTAAA 65

SEQ ID NO:3398

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03975

SEQUENCE DESCRIPTION:

GATCCCCAAT ATATCTACCA TTGTATGTTA AATAAATNAC CATTGGTGA GAAAAAATTC 60  
TAAA 64

SEQ ID NO:3399

LENGTH:71

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03976

SEQUENCE DESCRIPTION:

GATCTGAAA TNACTTAAA AGCTATTTA GTAATTAAA TAAATTTACT TTCTGGTTT 60  
ATACTCTCAA A 71

SEQ ID NO:3400

LENGTH:63

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03977

SEQUENCE DESCRIPTION:

GATCTCTATA NTTTTTTA AATTTCTCC AGCCTGGGTG ACAGAGCCAN ACTCCGTCTC 60  
AAA 63

SEQ ID NO:3401

LENGTH:63

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03978

01135

2153480

SEQUENCE DESCRIPTION:

GATCTCCTGC TGCCTTCCT GGAGTTTGTA AAATTNTNCC TGAATACAAG CCTATGCGTG 60  
AAA 63

SEQ ID NO:3402

LENGTH:62

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03979

SEQUENCE DESCRIPTION:

GATCCAAGCA TAGTAGAAAAA GCTTCATGTG TTTAAAAAAA TAAACAATAA CAAAAAAATTA 60  
AA 62

SEQ ID NO:3403

LENGTH:61

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03980

SEQUENCE DESCRIPTION:

GATCATGTGT TCTGGAGAGT GTTCTTTATT CAATAAGTT TTAATTTAGT ATAAACATAA 60  
A 61

SEQ ID NO:3404

LENGTH:61

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03981

SEQUENCE DESCRIPTION:

GATCTAACATT TTCAAACCTT CACTATTTG AAAATATAAC CAAGGCCGGT TGCGGTGGAA 60  
A 61

SEQ ID NO:3405

LENGTH:60

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03982

SEQUENCE DESCRIPTION:

GATCATGAAA CTGATTGTAA AGCTTTTGA CAACTAATAA ATGTCTGGT AATTGCTAAA 60

SEQ ID NO:3406

LENGTH:59

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03984

SEQUENCE DESCRIPTION:

01136

2153480

GATCAATGGA TTTGTTACA ATGTGATATT TTCTATTAAA TCCAGTATT TCAAATAAA 59

SEQ ID NO:3407

LENGTH:58

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03985

SEQUENCE DESCRIPTION:

GATCTTGAC TAACTTATGA TAGAATGTAT CAGAATAAAT ATTTTAACA GTGTTAAA 58

SEQ ID NO:3408

LENGTH:53

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03986

SEQUENCE DESCRIPTION:

GATCATNAAA GTATACAAAA TAAATAAAAGT AGGAGATTT TTTGCTGTTT AAA 53

SEQ ID NO:3409

LENGTH:121

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03987

SEQUENCE DESCRIPTION:

GATCTGTTA GTGAGATTAA GCATGTGTGA ATAAAGTATA TGCGAGGAGGA AATTGCTTG 60

TNTTCCCAAT CGGTAGAAAT TCGGGACCAT AAAAATTGTG TTTTACCATG TGGCCTACAA 120

A 121

SEQ ID NO:3410

LENGTH:51

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03988

SEQUENCE DESCRIPTION:

GATCATTGTT AAAGGATTGC TGCAAATAAA TACACTTAA TNTCAGTC A 51

SEQ ID NO:3411

LENGTH:60

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03989

SEQUENCE DESCRIPTION:

GATCTTAAACATTTTAA TGAACTAAGT TGAATAAAGG CACAATTAAC AACTGTCAA 60

SEQ ID NO:3412

01137

2153480

LENGTH:53

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03993

SEQUENCE DESCRIPTION:

GATCAAACAG AAGCAGCCGT GGGCAAAATA CAATTCATT TAACAAATTG AAA

53

SEQ ID NO:3413

LENGTH:521

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04020

SEQUENCE DESCRIPTION:

GATCTCATAG GACGGAGGG GAAATGGTTT CCCTCCAAGC TTGGGTTAGT GTGTTANCTG 60  
CTTATCAGCT ATTCAAGACAT CTCCATGGTT TCTCCATGAA ACTCTGTTGTT TTCATCATTC 120  
CTTCTTAGTT GACCTGCACA GCTGGTTAG ACCTAGATT AACCTTAAGG TAAGATGCTG 180  
GGGTATAGAA CGCTAAGAAT TTTCCCCAA GGACTCTTGC TTCCCTTAAGC CCTTCTGGCT 240  
TCGTTTATGG TCTTCATTAA AAGTATAAGC CTAACCTTG TGCTAGTCCT AAGGAGAAC 300  
CTTTAACAC AAAGTTTTA TCATTGAAGA CAATATTGAA CAACCCCCCTA TTTNGTGGGG 360  
ATTGAGAAGG GGTGAATAGA GGCTTGAGAC TTCCCTTG TGTTAGGNC TTGGAGGAGA 420  
AATCCCCCTGG NCTTCACTA ACCCNNTGG ACATACTNCC CACAACCAG TTNGATGGGN 480  
TTTCCCGTAA TAAAAAGGNN TNNGGNNTTN CCTTTTGAA A 521

SEQ ID NO:3414

LENGTH:501

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04021

SEQUENCE DESCRIPTION:

GATCAGAAAT NACTGTGTCA TGGTGCTCAT TCACTGCAA CTCCCAGTTG NAAGCTCCTT 60  
GGCTCCCCG GAGGAGCAAG AATCTCATAG TTCAGAGACA CAGAGGGCCT TTTAGCCCTA 120  
ATNACCTTT GGATGGACT GCAACTCATG ACTATCCTGA TATTGGAAGA AAGGACTTTG 180  
TTAATCTCT CCCCCATAGC TCTGCTGCGT AGGTCTACAT CTTACTCAGA ATCACTACAC 240  
ATTCCCTTAG TCTTCCTCCA AGCTCCAGAG CCATTGGTAC AAATGCTTA TTGAAACTAA 300  
ATACATANTN NACACAATGA GATGAAGACA ATATAGANGT NCGCATAGTC ATCATAATCC 360  
CGTTCCCTGG CGGGTTGAGG CAGCTCAGTG GCTGAGCCCA GTCAAGCCAA CCCGGNAGTT 420  
TCACTCACCG CNTTCAAGGN TTTGATGCT AATTCTTTG GGTTTCTAC AGTTTATTAA 480  
ATAAGTNGTC TGNGTGGAA A 501

SEQ ID NO:3415

LENGTH:485

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04022

SEQUENCE DESCRIPTION:

01138

GATCTCAGTG AACTAATACA CAGCTTGAGC GTTCCATGT GCTAATGTTG CACATTTACT 60  
 AAAAAACTTT GGAAATGGAA AATAATGTAT TAGTGCAACA GTTGATGTGC TTCTTGGC 120  
 AAAGATATAG TTTTGTCCA CAATTTGTAC TAAAAGCGA AAGAACATTG AAAACATAGA 180  
 CTTACTGGCT GTAGCAATGC TGGCCTGTTA ACTGATAACT AGAACTTAGG TTCACGTTA 240  
 TGTAAGTGT GTAAAACCTA GTAGAGCTTG CATACTGGG CACTCAGTAA ATGGTTGGT 300  
 TCCTTTGCC CCTTGGTAAG TTTATTTAC CCATCCNCCC ACCTGCCAT TCTGACTTTN 360  
 TATTAACATC ANCCATGTGG GACCCAGNGG TGTTTAATGN GGATGTTATT NCCAGAAGGA 420  
 GGATTTGAGA AAAATTGGG GATNTTCATT GCAGGTTAAC NATTCCAAAA ATNCTTTTG 480  
 GTAAN 485

SEQ ID NO:3416

LENGTH:471

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04023

SEQUENCE DESCRIPTION:

GATCTGTTT TTCATCGAGG TNTCGAGGT TNCTTNAAA GATAGTGANA NGCAGACACT 60  
 GCTCCTTGTG CAGCTCTGGT ACCTCCTGCC CACTGCTGTC ACTTCAAGCC ACTGGCAATG 120  
 CTTCTGTCT CGTGTCTTGG AGGAAAATCA CCTGGGGGGGA GGGGACTTCT TGTGGTAAGA 180  
 GCAAGTGCAG GTATGAAATG CGAAGATTGC CCCAGCTAAA AGTGGACAAG TCCGCTTGT 240  
 GAGATGAATA CTTCTGAGA NNCCNNNCAA GTATCTCTCC ATTTTACCAT TATGAAAATC 300  
 ATCATTAAGA AAAACAGTTT AGATGCCTTC TCCTTTGAG GGAAAAAGGG TGCTTTTAT 360  
 TGTATAAACG AGCGTCTTAT GTATTTGAT ATACCATTGT TTGAACTTCC GTCTTAGCT 420  
 GATAGATTCT CAAATATCCT NGATTTGGG ATGTTCACTA TGTTGTGAG N 471

SEQ ID NO:3417

LENGTH:466

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04024

SEQUENCE DESCRIPTION:

GATCAAATAT ATTCAGACT ATAAAAGCAG GAGGTTATCT GTGCAGGGGA CTGGCATCAT 60  
 GTATTTAGGG GCAAGTAATA ATGGAATGCT ACTAAGATAC TCCATATTCT TACCCGAATC 120  
 ACACAGACAG TTTCTGACAG GCGCAACTCC TCCATTTCC TCCCCCAGGT GAGANCCTG 180  
 TGGAGATGAG TCAGTGCCT ATCTGAGANG GANCCGACCC CTAGTTGAGA GCACCTTGCA 240  
 GTTCCCCGAG AACTTCTGA TTCACAGTCT CATTGAGA GCATGAANTG TCCTCTGAA 300  
 GCATAGCTT NNNAATATCT TTTTCTTCT ACTCCTCCNT CTGACTCTAA GAATTCTCTC 360  
 TTTCTGGANT CGCTTGAACC CAGGANGGCG GGAGGTTNCA GTAAGCCAAG GTCANTGCNA 420  
 CTGCACTNTT AGCCTTNGGT NANAANTNGA GGTTCCATT TNTAAA 466

SEQ ID NO:3418

LENGTH:464

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04025

2153480

SEQUENCE DESCRIPTION:

GATGCCAGG CTGATTGAGA AGAACAAAGAT GAGTGACGGG AAGAAGGAGG AGCTCCAGAA 60  
GAGCTTAAAC ATCCTGACTG CCTTCCAGAA GAAGGGGGCC GAGAAAGAGG AGCTGTAAAA 120  
AGGCTGTCG TGATTTCCA GGGTTGGTG GGGGTAGGGA GGGGAGAGTT AACCTGCTGG 180  
CTGTGAGTCC CTTGTGGAAT ATAAGGGGGT AGTGGGAAAA GTGGTACTAA CCCACGATTC 240  
TGAGCCCTGA GTATGCCTGG ACATTGATGC TAACATGACC ATGCTTGGGA TGTCTCTAGC 300  
TGGTCTGGGG ATAGCTGGAG CACTTACTCA GGTGGCTGGT GAAATGACAC CTCAGAAGGA 360  
ATNAGTGCTA TAGAGAGGAG GAGAGGAGTG TACTGCCAG GTCTTGACA GGTGTAATT 420  
TCATTCAAAAGGTTCA GTGTTTGGG TTAAGGTGGA TAAA 464

SEQ ID NO:3419

LENGTH:457

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04026

SEQUENCE DESCRIPTION:

GATCACCTTC CTGTCTGGAG GCCAGAGTGA GGAGGAGGCG TCCATCAACC TCAATGCCAT 60  
TAACAAGTGC CCCCTGCTGA AGCCCTGGC CCTGACCTTC TCCTACGCC GAGCCTGCA 120  
GGCCTCTGCC CTGAAGGCCT GGGCGGGAA GAAGGAGAAC CTGAAGGCTG CGCAGGAGGA 180  
GTATGTCAAG CGAGCCCTGG CCAACAGCCT TGCCGTNAA GGAAAGTACA CTCCGAGCGG 240  
TCAGGCTGGG GCTGCTGCCA GCNAGTCCCT CTCGTNTCT ACCACGCCT ATTAAAGCGGA 300  
GGTGTCCCCA GGNTGCCCC AACANTTCAG GCCCTGCCCN NNTNCCAAT NTTTGAAAGA 360  
GGAGGNCGCC TTCTNGGGG GCTTCCAGGT TNGGNTTTNC CGGGNTTTT TTTTTTCCC 420  
TTGGGTGANA NATGGGNTGT TNNGGNGCG GTNTTN 457

SEQ ID NO:3420

LENGTH:452

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04028

SEQUENCE DESCRIPTION:

GATCTGGAGG GGTCAACGGA AGACGGAACA TGTCCACTTC CAGGCCAG CTTCTNAGCC 60  
TGCCGTTGC CACTCTCCAG CATCTGGCC AGCCTGTCCA TCCTCATCTC TCTTCCTCCN 120  
NNACTCCGTG CTCCCATCAC TNGAACCAT TTGCATTTNT TTGTCTCAGC TATATTGTCT 180  
CACCTCTGAG TTTTGCCCA TGATGTTGGA TGCCATGGAA TGCCATATCN TCCCCATTAT 240  
CTCCCCCTTG TNTGGATAAT TCCTACTCAT CCTACAATAC TGATTTTAT CTGTGCAAAG 300  
AAGGTCTTCC CCAAGTGGCC TCTGGTTNG ANAAGGGNG TTCCCTGCG TTNTCCAGA 360  
CTTTTTGTT TCCTNCAACC AAAAGGCTTT AGGCACCGTG GGGGAAGGAG GGGTNTNNNT 420  
TNGTCCNAGG GAAAAGNNT NGNGCAAAT GN 452

SEQ ID NO:3421

LENGTH:450

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04029

01140

## SEQUENCE DESCRIPTION:

GATCAAAC AACCTTCAG CGTATTCTCA GCTATGACAC AGTGGTGCAA ACAACTGGAG 60  
 ACTCGTGGCA CATAACCATAT GATGAAGACT TGGTAGAAAG ATGTTCTGT GAAGTACCAA 120  
 CCAAATGGCT TTGCCTCCAC CAAAAGACAT AGAGATTCTT ACCTCTATGC TAAGTTGTG 180  
 TTTGGGTACC CTCTAGGTG GCATCAGAGG CTCTTGAGCT GGTGTTGTT TAGGGCATTG 240  
 CCTCTGTCTT GAAGATAAAA GGATTNTATT AACAGCATTG ACATTGATT TTTAATGAAA 300  
 TGAGATATAT CTTTCATAA CCAGCTGCGT TTTTCCCC TAACATTGT TTTGGAGGG 360  
 CTTATCAAGA GTTGGAGACC TTAGTGTAGA GCAAAACCTG CATTCTCCT ACTGGGCCAG 420  
 CTATTCCACT TAGGCTTGGG TGACTAANAN 450

SEQ ID NO:3422

LENGTH:444

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04030

## SEQUENCE DESCRIPTION:

GATCCAAGT ATTAGGAGCT ATTCTTAAA TAGTTAAAT TTGCCTTGAA AAAAGTTCC 60  
 ATTACTTAAA AGTATTAATT TAAGCAAAAT CATGGAACAC ATTGACTAAA AAATACCTT 120  
 TATTTTACT CAACTGTAA AAGGGGCAGA TAAAGACTTT GGCAAATTG ATTAACTGCA 180  
 CAAAATAATG TTATCCAAAC TGAGTAATT ATTGCTGGTC TGNGGCTTGC CTTGTTACA 240  
 CTTAAGTAGA ATTACGTG TTTCCACAAA TGGCAGATAT CANCATTAA AGNNATTAA 300  
 TAGTGACCTA TTCAATAAGG CANTCATCTG GGGTAGCAA CTTTNTTTA AATCTNACAT 360  
 AACCTCAGGC TTATATAANAA NGCCACCATA ATTGGAAAAT TGGGGNTCCT CCCCTCTAAA 420  
 NGCCTTAAGG GATTCAAAGG CTCN 444

SEQ ID NO:3423

LENGTH:439

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04031

## SEQUENCE DESCRIPTION:

GATCTTGAA AAATGCTGTT AGTATCCAAC CTTAAATAT ATTAGTATAT GGGTTTTAT 60  
 TAAAGAATT ACTTGAATT TNCTATTTAA TTCATATGTA AATAAAGGAA CATTCTATT 120  
 CACTAAAAA AATTATATCA GTTATTAGGC TGGGTGCAGT GGCTCATGCC TGTAATCCC 180  
 GCACTTTGGG AGGCCAACGC GGGTGGATTAA CCAGAGTTCG GGAGTTGAG ACCAGCTTGA 240  
 CCAACATGGA GAAACCCGT CTCTACTAAA ATTACANAAT TNGCCAGGTG TGGTGGCGCA 300  
 TGCCTGTAAT CCTGGGCTAC TCAGGGAGGCT TGAGGCAGGN GAATNGGNNT GAAAACCCCN 360  
 GGGGGNNAGA GGTTGCGTT GAGCTGAGNN TTGCGCCATT NNACTTCNN CCTGGGCAAG 420  
 GNNGGGNGNA ACCTNTNNN 439

SEQ ID NO:3424

LENGTH:437

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04032

2153480

SEQUENCE DESCRIPTION:

GATCTAAGAA ATCATGTGCA TATATCTTC AGATTCTAT TTTGGGAAAN TGAAGGTTTC 60  
TACAACATAT TGTTTCAGTG TTCAAATAAA CTGAAGGACT CAACATTACA TTTGAACTAT 120  
ATCCTTCCTA GTGGGGTAGT GTGAAAAAGN GNTTGGCTGA TTCTAAAAC TCTGCCAGCC 180  
CTGCAGTAAT CTCCAGGGNC NNGTTATTGT TCAGACATT CNTGGTGATT CCTGGGAAGG 240  
AAGCTTGGCT GCTCAGTTTC TGAGTCTGGG GTGAGATAAT GTTCTGGAA GGGACATCTG 300  
TTCTTGGTG TAATCTCTCA TGGTGAAATC TGCTCTGTAC ATCAGACAAT TGCATTGCTA 360  
CCAAGTTICA TACCAAATAT TTGAAAGGTT GGTATTGAAT CAAANCAA ATATTAGTT 420  
TTNTTAAACT CATGGGN 437

SEQ ID NO:3425

LENGTH:424

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04033

SEQUENCE DESCRIPTION:

GATCCAAACC TTACACCTGA GTCTGTTAAG AGCGCCCTGC TACAGGAGGC CACAGACTGC 60  
CTGATTCTNN NGGACCGCTG TTCTCAAGGA CGGGTAAAGG GTCTCCTGGC CAAAATTCCC 120  
CAAAGCTGTG AAGACAGAAA AGTGGTGAAC TATATCAGAA AAGTGCAGCA GGTTTCTGAA 180  
GGCGCACCCCT ACAATGGAAC TTAAGACTTG TATTACTTTC CCAAGAGGAA AGGATTTTT 240  
TCCCCATCCCN NNNTGTATGA ATGGAGTTAT TTANGAAAAA ANGATATTACGAAAC 300  
TTTGTAAGTG AAAGCTGCTT TTTCCTTCCT TTACCTCCA TAAGGAATAG 360  
GGAANGTAGG ACCAAGANAN AATTGAACTC CTTCCCATTT TCTAAATAAA GGTTTGGGG 420  
GAAA 424

SEQ ID NO:3426

LENGTH:422

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04034

SEQUENCE DESCRIPTION:

GATCTCNGAG CTACAATACT CACTANATAT ANTTTCCAA TCAAAATATN CTATTCTATA 60  
TTCTAAGGGT TAATATGTGA TTATAGTGTG CACTTGCCAC CATTTCCTTA AATCAATGGA 120  
CTTGAAAAGT ATTAATTAG ATGGATGCGC AGATATAACCC TCAGTTCACT CATAGATTGG 180  
AGTTTGCATA TAATANNNCN CCGGTATGTN GACACTATTG TAAATAGTTC TATTATGACT 240  
GAAATTTAAT TAAATAAAAN NGGTTGTAAA ATGNGATGTG TATGTGTATA TACNGTATGT 300  
GTACTTTTA AAAATAGGGTG TATGTCCCAA CCCTTTTA TACAGGTNTG AATTTAAAAA 360  
TACCATGGTT ATATACATAT ACCTNGNNNT NGTCTAAAAA TAAAGGNTT TNATGCACGC 420  
NN 422

SEQ ID NO:3427

LENGTH:408

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04035

01142

2153480

SEQUENCE DESCRIPTION:

GATCTTCCA CCTCAGCCTC CTGAGTGGCT GGGACTACAG GTGCATGCCA CCAAGCCTGG 60  
CTAACTTTT GTAGAGATAG GGTTTNCCA TGCTGCCAG GCTGGCTTAG AATTCTGAA 120  
TTCAAGTGAT TTGTCTGCCT CAGGCTCCA AAGTGCTGGG ATTACAGGCA TGAGCCACAC 180  
TGCACCCAGT CCATGTCACC CTTTTATAT GAAACACCTA TTAACACGGT ACAACAACAC 240  
TTCAAAACAT ATTATTTGAA TTNGGCNTC TGATTTTTA GTCANCAATC CATTANGCA 300  
AANACCTNGT TTTCAAACACT CAGATGTTCT CCAACTTACA CTAATGTNTG GTTTTTTGG 360  
ACTTNGGTGN GGGGAAAAAN TTAACCNGGT TTTNNNTTTN TTATCAAA 408

SEQ ID NO:3428

LENGTH:378

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04036

SEQUENCE DESCRIPTION:

GATCTTAGCT TCTTTAATCA GACTTTGTGA CTTAAAAGTT TGGGGGTTTT CTTTGAAAGT 60  
TTCCAGCCCT ATTCAGAAAG CAACTCTGG CTGTGTGCAT TTTCAACTC CAAGCAGCCC 120  
AGGGGTAAGT AAACAAAGTA TGGATGAAGG TCAGATTTN TTGTCANNNT CTGAGAAACC 180  
TGGCAGCCTG CTGTTAACAA CACAGGCCAG TATTGGGTTT TATTGAATT GGTATGTGAC 240  
CAAGGTCGGC CAAAGGATG GCGCAGGTCC TGGGCAGGAA AGAATTTTC CTTTATCACA 300  
TAACTGTAAT ATTTGGTTGC TCAGCATAAG TNATGGAAGC AACCACTTAA TTTCTAATAA 360  
ANTTGTGTTA ACCTCAAA 378

SEQ ID NO:3429

LENGTH:376

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04037

SEQUENCE DESCRIPTION:

GATCACAAACA CCAGTACCAAG CACGAAGAGC CTCCTCCGA AAGAGTCTCG ACTGGACACC 60  
TTCTGGGACT AGCAGTGAAT CGGGACACAA ACCACCCACC CCATTGGGAG AAAAACCCAG 120  
ACGCCAGGAA AAGAAGAAAC AACAAAGGCA GGAGAACAGC CACTTCAGA CTTGAAAATG 180  
ACAAAACCT CAGTTGAGCC TGAGCCCCG GCGCGGGGGC TGCTACACTA CAGGACACCC 240  
AGCATCGGCT TTGACTGCAAG ACTGTCACC CACACGAGCC CTGTGCTTT GGTGAAATA 300  
ATGTACAATT TGTGGATGTC ATTGAATCTA GAGGACTTTC CCCTTTTAT ATTTGTATTA 360  
ACTTTAACTT ATTAAG 376

SEQ ID NO:3430

LENGTH:368

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04039

SEQUENCE DESCRIPTION:

GATCAAGCTT GTGTACTTGA CCGTTTTAT ATTACTTTG TAAGTATTCT TGTCCACATT 60  
CTACTTCAGC TTTGGATGTG GTTACCGAGT ATCTGTAACC CTTGAATTTC TAGACAGTAT 120

01143

2153480

TGCCACCTCT GGCCAAATAT GCACCTTCCC TAGAAAGCCA TATTCCAGCA GTGAAACTTG 180  
TGCTATAGTG TATACCACCT GTACATACNN NGTATAGGCC ATCTGTAAAT ATCCCAGNGA 240  
NCAATCACTA TTCTTAAGCA CTTGAAAAT ATNNCTATGT AANTNATTGT AAACCTTTTC 300  
AATGGTGGG ACAATGGCAA TAGGACAAAA CGGGTTACTA AGGTGNAATT GNCCAAAAAA 360  
TTTTTTAN

368

SEQ ID NO:3431

LENGTH:374

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04040

SEQUENCE DESCRIPTION:

GATCAATCTC AATTCCCTTT CATGCCCTCC TGCATTGCTG CTGCGTGGGT ATTTGTCTCC 60  
TTAGCCATCA GGTACAGTT ACACTACAAT GTAAGCTATA GGTGGAGCAT CAGCAGTGAG 120  
TGAGGCCATT CTTCATCCTT AGGATGTGGC AATGAAATNN TGGTGCAAGT TCCTTCTCT 180  
TTTGTGAATC TTCCCCCCC A TTCCCTGTT ACATGTAACC CAACAAAATG CAATTCTAG 240  
NGCCTCTGT CCAATCAGTT CTTCCCTGT AGTGAGACGT ACTTGGCTAC AGATTCTGC 300  
CTTGTGTTGC GACATNNTC CCATTCACAC AGNTATTAN GGGGCTAATN AANNGANAA 360.  
ATAAGGCTTA CAAA

374

SEQ ID NO:3432

LENGTH:369

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04041

SEQUENCE DESCRIPTION:

GATCCTGGAG AACCTAAGAC TCCAAAAGCG TGGTACTGGA GGAGTGGACA CTGCTGCCAC 60  
AGGCCTGGTC TTTAATATTN CTAATTGGGA CCGACTAGGC AAATCANAGG TGGAGCTGGT 120  
GCAACTGGTC ATCGATGGAG TAAACTATTT GATTGATTGT NAACGGCGTC TGGAGAGAGG 180  
CCAGGATATC CGCATCCCCA CACCTGTAT CCACACCAGG CATTAACTCC CCATCGNCCA 240  
GCTGATGACT CAAGATTCCA AGGAGTTCTG CTCATTCTAA TGGTGGCCG TTCTACTTGN 300  
TCTGGACCTG NCCTGNATC CCCNTNGNCC TNTNNNTCC TAGTTAAAGA CTTNGTTAGC 360  
TGATGNAAA

369

SEQ ID NO:3433

LENGTH:358

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04042

SEQUENCE DESCRIPTION:

GATCGTGGGG TTGTTGGCAG AGGGCAACCC TGGGCCCCAC ACCGTGTGGA CAGGCAGACA 60  
CCAGATTGTC CAGGAGCAGG AGCTGCTGGG ACTGCGCTGG CCCCCGGACCT AGTGGGCCTT 120  
CTCCTGGCTG CTGAGATGTC GTCTGTGACT GGCCTGGCTG GAGGGGGAGT GTTGACAACC 180  
CAAAGCTGTT CTCCAGTCTG GGGAGGGAGA GGCAGGGTCC CCAATGTCCG AGCTGNATCT 240  
GGACGCTGCT CTTAAAGGAC CTCCTGGGN AGGGGAAGCG GTAGGNTCTG GACTGGNAA 300

01144

2153480

GATGCTGTAT GACCTCCCTG AAGNACCCGT GACTTCCCCA TGNTTACCC TTTTGTGN 358

SEQ ID NO:3434

LENGTH:354

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04044

SEQUENCE DESCRIPTION:

GATCTAGAAA GCAACTTGGGA AGTGTAAAGA GTCACCTTCA TTTTCTGTAA CTCAATCAAG 60  
ACTGGTGGGT CCATGGCCCT GTGTTAGTTC ATGCATTCAAG TTGAGTCCCA AATGAAAGTT 120  
TCATCTCCCG AAATGCAGTT CCTTAGATGC CCATCTGGAC GTGATGCCGC GCCTGCCATG 180  
TAAGAAGGTG CAATCCTAGA TAACACAGCT AGCCAGATAG AAGACACTTT TTTCTCCAAA 240  
ATGATGCCTT GGGGTGGGGA GTGGTAGGGG GAAGAGCTCC CACCCTAAGG GGCACACACT 300  
GAGTTGCTTA TGCCACTTCC TTGTTCAAAA TAAAGTAACT GCCTTAATCT TAAA 354

SEQ ID NO:3435

LENGTH:354

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04045

SEQUENCE DESCRIPTION:

GATCATTAAT GAGGAGCTGA TGGCCTCCCT GGACCAGCCA ACACAGACAN TGGTGATGCA 60  
CCGCACTGAG CCCACTGCC AGCAGAACCT GGCTCTGCAG CTGGCCGAGA AGCTGGGCAG 120  
CCTGGTGGAG AACAAACGAAC GGNNTTTGA CCACAAGCAG GGCACCTACG GGGGCTACTT 180  
CCGAGACCAG AAGGACGGCT ACCGCAAAAA CGAGGGCTAC ATGCGCCGCG GTGGCTACCG 240  
NCAGCAGCAG TNTCAGACGG CCTACTGAGC TCTCCACTCT GTTCCCAGG TGGGCCATCC 300  
AACCTTGAAG TCCTAAACCA CACCTCAGTC ACTAAAGGTC TGTTAAAGT TAAA 354

SEQ ID NO:3436

LENGTH:350

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04046

SEQUENCE DESCRIPTION:

GATCTAATTT ATTTATTTAT TGCTGGCCG GTGACTCGGG GGAGGAGGCG ACCCTGTCA 60  
CTGTCCCACC TGCTGCTGCC CCTTGGAGCA GCCTGCACCT NCTCTCCCT CATCCGGCAA 120  
CAGTNTGAAA GTACGTGGAG GACGGGACCG GAAGACGAGA GAGGGCTGGA CATCTGCC 180  
ACCGTNTCCC AGCCAGGGCA GGNNGAGGGGA CCATGGCCCG NANGTCAAGG GGCCCCGATG 240  
TGCACAGCTG CCACAGGGAG GGAGNTCTTG GGGAGATGGG CANTCAGGTG GCCCCTCCTT 300  
GGTNGAGTGC ACANANTTGC GCGNACANAT CGGGGTTTT CCTGGNTTN 350

SEQ ID NO:3437

LENGTH:348

TYPE:nucleic acid

TOPOLOGY:linear

01145

2153480

CLONE:HUMGS04047

SEQUENCE DESCRIPTION:

GATCTTGAAT CTCTTCTTT GTTCTGTTG TTTAGTTAGT ATCATCTGGT AAAATAGTTA 60  
AAAAACAAACA AAAAACCTCTG TATCTGTTTC TAGCATGTGC TGCATTGACT CTATTAATCA 120  
CATTCAAAAT TCACCCCTACA TTCCCTCTCCT CTTCACTAGC CTCTCTGAAG GTGTCTGGC 180  
CAGCCCTGGA GAAGCACTGG TGTCCTGCAGC ACCCCTCACT TCCTGTGCCT CAGCCCACAG 240  
GCCACANTGA TAATGGTCTG TTTAGCACTT CTGTATTTAT TGTAAGAATG NTTATAATGA 300  
AGATACACAC TATANCTACA AGAAATTATA AATGTTTTTC ACATCAA 348

SEQ ID NO:3438

LENGTH:347

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04048

SEQUENCE DESCRIPTION:

GATCTGAGCC ACCCTCCCCG CACAGCCCTG CACCCCGCCC CTAGGGTTGG CAGNCTCANT 60  
TGCCCCCTGG CAGAGGAACA AGGACACAGA CATTCCCTCA GTGTGGGGGG CAGGGGACAC 120  
AGGGAGAGGA TGGTTGTCCC TGCGGAGGGC CCTCTGGCCC CAGGCAACCT TAGCCCTCA 180  
GAACAGGGAG TCCCAGGACC CAGGGAGAGT NTGGGGACAG GACAGCCTGT TTCTTNAGC 240  
TTCCTGGGGT GGGAGGCACA GGGGCAAAGC ANTACCCAG GGAAANTGGG AGGTGGTGCT 300  
GGTCTCTCT CCAGGNCCAC CATGCTGGGA GAGGCGGCCA GAGCTTN 347

SEQ ID NO:3439

LENGTH:346

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04049

SEQUENCE DESCRIPTION:

GATCTCCCT GGNGGCCTTC GGCTGCNTGC NTGCCTGAGG TCCNCCTGC CAGTCCGGG 60  
CCCTGGAGAG CAGATGCTGT CTTGTNATGT ACAGGAGGAC CTTTTAAAAA AATCAAGTTT 120  
CTATTTTTTN CTGGTAGTCC GCATACCCAT ACCCTCTGTT TTTNAAGGC AAAGGCCAAT 180  
NAGTCCCCAT TTGTAGCATG GCACCCAGGGT CTTAGGCCTA GTCCCTCTCAT TCCTCCCACC 240  
CTCCGAGATG GTCAGTGTGT CATGGGAAGC CCACCCCCAG CTCTGCCAGT GCTCTCTGGG 300  
CCTGGNTCCN AGTCAGTGGT GGCCACGATG CGGTACAGGG CATCCN 346

SEQ ID NO:3440

LENGTH:343

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04050

SEQUENCE DESCRIPTION:

GATCCATGTG ATTATTTAAA TGACTGTAGC TGAGAGCTCT AATTCNCCTG TCTTGAAACT 60  
GTATAAGANC TCATGTGATT AAGTCACAG TTTATTGTT GTNTGTTAG TATTTNAGAA 120  
ATATACCAGC ACTACTAATT AACTAATGTC TNTNATTAT NATATTATGA TAAAGTAAAAA 180  
NTTCACTTG CATTAAGTCT AACTGAGAA GTAAATTACT GGGNGNGAN TGAGCAGCTT 240

01146

2153480

TGACTTTGAC AGGCAGGTTG TGCAGGAAAG CACAGTGCCG TGTTGTTAC AGCTTTCTA 300  
GAGCAGCTGT GCGNCAGGG TAGAGGAGTG TNGAAATTCA TTN 343

SEQ ID NO:3441

LENGTH:340

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04051

SEQUENCE DESCRIPTION:

GATCTGCTCA GAAAGGAAGA GGCAGGCGCC AGGGGGAACC CCCTTCGTGT TTTGTAACCC 60  
TCCCTTNAAG GTGAAGCCCT TTTTCTTGCT AAAACCGGCA ATTCTCCGGT TAGAAATNTT 120  
ACTTGGTGTGTT TTTTGGTTT GTGAAACGGC CGTCCCAAAG CTGGCTGGAT TCCTAGAAGA 180  
GTCTGTGTG AAGGCATCTT TCAAGCCCTC GCTCTGGTTC TNAGGGCAGC ATTTCCAGG 240  
CGGGTTTGTGTT TTGCATTCTC TGGAGCCTCT CCGNGNAGCA ACCAGACGGG AGATTTAAT 300  
TTAAGCTGT TCATGCTGGG NCTGACAGCC TGCAGGGTTN 340

SEQ ID NO:3442

LENGTH:339

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04052

SEQUENCE DESCRIPTION:

GATCCTTGGG CTGGCCTAGA ACCAGTATCT GTAGTGGATA TAAGCCAACA ATACAGCAAT 60  
ACTCAAACAT TCACAGGCAA AAAAGGAAGA TACTTTTNTT AACATTCTG AAATTCAACT 120  
GGAAGCTTCA TGTGTCAGGA ACATCTTGGA CAAAACTTA NGTTGTGTTG ATATAAATT 180  
ACCCAAAGAT GATGNNTTG ATTGGNTAAT TAGTAAGGTC TTTTGTTAT TTNCATCGT 240  
ATCAGGTATT GTTGTATTA GAGAAAAANG TAGGATAACT TGCAACATT AGCTCTGGAA 300  
GTACCTACCA CATTNGAG ATTACCGTT TCCATATTN 339

SEQ ID NO:3443

LENGTH:339

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04053

SEQUENCE DESCRIPTION:

GTATGCCGT TNATGTTGCT TTCTCCTTG TCCTCTTGGA CTTGAGGGCA TTGTGAAAAG 60  
CTTGCTGTG ATTTAAAAAT GCCAGCAATT TTAATCTAGC AGTGTGAAG CTGGGAATT 120  
TTTGGCGCAA TCCATGTAGC AGTGACCCAG GCTTGGGAGC CAGAAACAAG TGTGACCTGG 180  
GATTTNATT AACACAACTG TTGCCAAAGA GTTGGCTTG TTTATTTGGT TTTGGCGGGG 240  
AGAGGAGTGG TATTTNATGC TTTCTGTGGA CANTGTAACC CTAACACAN CANGTATTT 300  
AANTGCCACC TACATAANTA AACCATANGC NTATTGAAA 339

SEQ ID NO:3444

LENGTH:339

TYPE:nucleic acid

01147

2153480

TOPOLOGY: linear

CLONE:HUMGS04054

SEQUENCE DESCRIPTION:

GATCTACATA AAAACTGCTA CATGNCAAAA ACCACACCTA AAGAAATTTC AAGAATTGG 60  
CACAGTTACT CACTTGTGT AATCTGAAAT CTAGCTGCTG AATACGCTGA AGTAAATCCT 120  
TGTTCACTGA AGTCTTCAA TTGAGCTGGT TGAATACTTT GAAAAATGCT CAGTTCTAAC 180  
TAATGAAATG GATTTCCAG TAGGGGTTTC TGCAATATCAC CTGTATAGTA GTTATATGCA 240  
TATGTTCTG TGCAATGTTCT CTACACAATT GTAAGGTGNC ACTGTATTAA ACTGTGAC 300  
TTGNCAACCT TTCAATAAAG CATATAAATG TTGGTTAAA 339

SEQ ID NO:3445

LENGTH:334

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04055

SEQUENCE DESCRIPTION:

GATCAGCCCT TTCCTCTATA AACAAATGACC ATTAGACGT TTCCGTAATT CCATGTATTA 60  
TGTATAGTAC ACTCTATAAA TGTAATGTA ATGCTTGTCT AAAAAGTGCA ATTTATTGTA 120  
CATTGTCCCA ACAAAATGTTT ACTTTATAAA TCGTTATGAA CTTGAATTGG ATTAGTATCT 180  
TGTTTTATG TGTGAATGAA GCCTTGTGAA ATAAACAAAT GCAACTGAGA AGGTAAACAAG 240  
GTGACTGTTT TTGTGAGCCA GTGATGTTT CAATGCTTG TGTTGCCCT TTGGCCCCAT 300  
TAAGCAGTAA TAAACATTG TTCTGAAGTC CAAA 334

SEQ ID NO:3446

LENGTH:334

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04056

SEQUENCE DESCRIPTION:

GATCCAAGAA GCGGGTCCCT GAGACGGGGG GTGGCTGCC TCCCCAGACC ACCCCGGCAG 60  
CCTGAGCAGN TCCAAGCAC TGGCTTGGGG TCCGAGACCT TCAATGAAA GCAGGGCGAA 120  
TGGGGGACA GGACAATTTC TCCCCCTCCA GGGGCTCCAG GACTCTCCCT GGGGGGCCCA 180  
CCTCTTGCCC CCTAACCTCT TTCCCCCTT TCTGCCCCCG TGGGGAGGAG CCCCTTGTAC 240  
CTGCTCCGTG CCCAACACAT GCCCTCTCTG TACATCTTT GGTAAATNAT GAGAAATAAA 300  
GGAAGTGGAC GCAAAGTGGAA TGCGGCAGCA GAAA 334

SEQ ID NO:3447

LENGTH:332

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04057

SEQUENCE DESCRIPTION:

GATCCAATCT CAGTGTCTAA CTCATCATCC CAGATTATTC TGAAGTGGAA ACCACCCCTCC 60  
GACCCCAATG GCAACATCAC CCACTACCTG GTTTCTGGG AGAGGCAGGC GGAAGACAGT 120  
GAGCTGTTCG AGCTGGATTA TTGCCTCAA GGGCGAGTCC AGTCATCAGC TCCGCTGTAA 180

01148

2153480

GCTGTTGGCC CTGCATTCAA GTAACCAGAA CCACCCGTGA GAGCTGCCAC CAGGTANTGT 240  
CACTCGAACG TTCCTTTTT TTTTTTNA ATTCCGGAAA GTTTAANTCT GTANTCCCAG 300  
GGGNCCATTT AAANANGGTT TNTTTTGTA AN 332

SEQ ID NO:3448

LENGTH:332

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04058

SEQUENCE DESCRIPTION:

GATCCAAAAA AAGCTNGAAG CCTACATTTC CCAGAGCCCC TTTCAGCTTG AATTCCAAAT 60  
GTGACTTAGC TTCTCTATG CAGATGTACC TACTTGAAAC TGGGAAGGCC AAATNAGATA 120  
GAGGNAATNT TTCTGCCAAC AAACAGCCAC AGAGCATTG ATTTTTCTAG AAGAGCAATA 180  
ACAGAGACCC CAGGGTGTGG TGTGGCAGGA CGAGGAGCAT CCATTTGCT GGNGGGGATT 240  
GTGGCTAAAA TAATGNGGCT CTGGAGCCAG CAATNGGCAG CATCTTCATG ACTTTCCAGN 300  
TTCCAGGCTG TAAGCAGAGA TAGCATCTCT TN 332

SEQ ID NO:3449

LENGTH:326

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04059

SEQUENCE DESCRIPTION:

GATCCACTAT ATGCCTCAGC ACATGGAACC TTAATGACCA AAGTGAAGAG CAGATTATTC 60  
ATACGGTGTA ATAAGCATCT GGAATGGACC CATCCGTGTA CTTCATTCAA ATGTGAAAT 120  
GTCATATTCA TTCAGATTAA TAAAGCTAGT AGTGTATAGT CAGAAACAGA ATCAAAGTTA 180  
GATATACATT TTTAAATATT TACTGCATAT GAGGCTTTCT GTTAATTTTT TAATGTGAAT 240  
AATTATATA TTGCACATTC TAGGGAATAA TATTGATTGT ATGNCTACTG TGCTGCATTA 300  
AGAAAATAAA ATTCCATATAT NCCAAA 326

SEQ ID NO:3450

LENGTH:329

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04060

SEQUENCE DESCRIPTION:

GATCAGAAAA ACTGAAGATG GAAGTTTGG CCGGTGCTCA TTAGACATGA GTCTCACTC 60  
TGTNTCTGA GCCCGTTCA TTCTTCCAAC CTCCCTGCC CCACACACTT ATCCCAGACA 120  
CAACACCATG TGGTCTGGAG GTCCCAGCCC CCACCTAAA AAGGTTATCC CNGAGAACTC 180  
CACCAAGACTT GGGAGCCCAA GTGCAGTGCC TGGNGCTGCT CCCATCTGCC GGCCCCNTTC 240  
TTCCCTNGCA ATTGGTTGN ACTCACTGGG CTGTGCTCTN CCCTGTTAC CCGATGNNNG 300  
GGAAATAAAAG GCCCTTTGC CTCTGAAA 329

SEQ ID NO:3451

LENGTH:325

01149

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04061

SEQUENCE DESCRIPTION:

GATCTGGCGC TTCTACTTTG AGGGCTTCTT TGACCTCATT GCTGTGGTAN GCCGGCGTAG 60  
TCCAGACCAT CCTATACTGT GACTTCTTCT ACTTGATACAT TACAAAAGTA CTCAAGGGAA 120  
AGAAGCTAG TTTGCCAGCA TAAGTGCCAA AGGCCATCAC CAGCATCTGT CCTTCAGGGT 180  
GCTCGGACAG ANTTNTTACC ACAGCAANGG CATAAGGTGC TTTATACGGA AANTCAGNAA 240  
CTTAACTCTT TTGTTGCAGN TAGTCATCAG TGGCTCTGTA AAAACGGAGG GGGAAAGNGN 300  
CNGGAGGTTT CTGTTAACATG CATCN 325

SEQ ID NO:3452

LENGTH:324

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04062

SEQUENCE DESCRIPTION:

GATCTGATTT TATGTCGTA ACTTTCTGTA AAGAAAGACA CAAGGACTTT TCAAAGACAG 60  
TTTATATCTT TCCAAGGCAG GAAGCTTGC ATTTGCAATC TTAGTGTGT GTCCCTTCT 120  
GATTTCAAA TACATCACAC CTGCCTTCCT GTTTGGGAG CAAAGATGTA ATTTCAATT 180  
CCCTTGCTAC CGTCCTTATT TAAATNATT CCATTCTAAG AGATTTNGT NATTNNNTA 240  
AATGTAATCT GAGCACTTN TNGTATTCTA AAAGATAGAT GATATCAGAT AAATATGTTG 300  
TACATTTGA TTAAAATTAT TTTN 324

SEQ ID NO:3453

LENGTH:339

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04063

SEQUENCE DESCRIPTION:

GATCTGGAAG ACAGACGTAC AGCTTGGAGG GCAGGGGGAC TCTAAGGCAA GGAGATTTAC 60  
AGTTGGGAAG GAGGCAGTGG CAGAGGGGTG AGGGACAGGG GCCCTTAAGT CCAGCGAGGA 120  
AAGCTCNNTG TGGGCCGCT CTACGCTCCG TTTGGGGTGA CCTGGAACGC CTCTTCTCCC 180  
AGCTCCCTCC AGCCATCAGC AGCCTCTGT CAAGCTTCTG CCTCGCCCCA GTCTATCCCC 240  
AACCCCCAAT CAAGACCACC TTCTTCACG GTCACTATT ATTCTTGTT CCTTTTCTT 300  
TTTGTAAGAA ACATTACAA AAACCAGTGC AAAACCAAA 339

SEQ ID NO:3454

LENGTH:317

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04064

SEQUENCE DESCRIPTION:

GATCTCAATG CTGTCGGGG ACCCTGAAGA GTTTTNTNAC CTGTTAGTC TCATCTAAC 60  
TTCCAATGTN TGATGTTCCCT GCCAAATTCC TGCCTGATTG TGGGTCCGTC CTGACCTCCA 120

01150

2153480

AAGGTCAGNT TGGTGCTTGA GGTCTCCNTG CTCTTGGTGG CAGTGGTAGC AGCAACAGCA 180  
GCAGCAGCAG CAGCAGCAGC AGCAGAGACC TNTCCACTTT CCCTTAGCCC TNTGNTGGGT 240  
AGAGGGAACT TAAGGGACTT CCTCCAGNNG CNTTTAATNT GGGATGGGT AAGAAGGTTG 300  
NGCTCCNCTG TTNGTTN 317

SEQ ID NO:3455

LENGTH:315

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04065

SEQUENCE DESCRIPTION:

GATCCTAAAA AAACCCAAAA ACACCATTCT CTAATAGTCA TGACAAATGG CTTCA GTATG 60  
GCTTGT TTTT NATTNCCAG ATGGCTTTN CTCTTATTTT TNGAAGCCCC AGTCTTGTAT 120  
TTTACAGGTA ACTTCAAAA CATCATGATG CTGCCAAATG TACTTTGTAACTTAAACA 180  
TTATGATTCC TGTATTATTT CAGTGAGAGC TACAGTGTGA TATTNCAGAG TCTATTAAT 240  
AAAAATGTGA GTTTGAATTA CACCATCTGT GCCAATTACA AAGCAATTAA AGGATTATN 300  
TNTNATGAAA AAAAN 315

SEQ ID NO:3456

LENGTH:312

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04066

SEQUENCE DESCRIPTION:

GATCTGAGGC TGTGCTCTG CCTTGT TTTT AGAGGACTTC AGCGTCCAAG ACTGGGGCCC 60  
ACCNTNTCA CCAGCACTAA ATGCACTAAC AAGGACTCCA GACCTGCAGC CCCAGACCCG 120  
CCGTAGTATA AGCCTAACAA GCAACANGTA GCACCTTAGT CTTTGTCCA GGAGAGCTGA 180  
GCAAGCTGGT GAAACCACTC TCCTTCCTTT AAACANC GTT TCAACCANCC TTN CNTGGA 240  
GCCAACNTGT AAAAAGTGGG TTGATTGCTG ACAGNATGGT CTTCTTCCC TGGATTNAG 300  
ACATACCA GT TN 312

SEQ ID NO:3457

LENGTH:309

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04067

SEQUENCE DESCRIPTION:

GATCTTCCG GGGCCTACAG GCGTGTAAAGA CAGCTTGGTC TGGTCTGTGC AGAAGTGGGG 60  
AGTGATGGGC AGGTTCGGCA GCCTAACATT GTTCAGGCGC ATGGCCCCCTG CGGTGTGTAC 120  
ACGAACCTCGG CTTCTTTGT CCTAGGTACG CCAAGGGCAG GTTTCTGGAG ACTCCCTTGT 180  
GCCCGGGATG GCAAGGGCAC CGGGCTGGCG TTTCCACATC TGTCTTCATT AGCAGANNAG 240  
TGATGATGGA TTTTATTCAC CTCACACTCC AGTTTGTAAAT AAAATGCCAA ATTCTGTCA 300  
CTATCCAAA 309

SEQ ID NO:3458

01151

2153480

LENGTH:309

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04068

SEQUENCE DESCRIPTION:

GATCAGCACCA ATTTGGTA TGTCGGTGA TGAGCGTTA GTGAGCCTNN TGGCTGCAGA 60  
GCACTATGAA ATCATGGTAC GTAGTCCCCG GCACCTGTG 60  
TTATTCCTAT ATCCTCCTGC 120  
AACTGTGGTT TGAAACTGCG CATTCTCTAG TAGTATATAT CGTGCCTGTC TTCAAAAACA 180  
TTTCCCTNN GTATACTCAT NCCCCCAGG CATTGGGTA GTGTCAGTC GACTGCACAG 240  
GGAACACGGT TTCCAGTGCG TTTGGCCCT ACTCGGGAAA CGTCTGCC 240  
TGATGGGN 309

SEQ ID NO:3459

LENGTH:308

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04069

SEQUENCE DESCRIPTION:

GATCTAGCTG GTCACGACGA TGTTCACC AAGGTACAG GAGCATTGCG TCGCTGATGG 60  
GGTTGAAGTT TGGTTGGTT CTGTTTCAG CCCAATATGT AGAGAACATT TGAAACAGTC 120  
TGCACCTTN ATACGGTATT GCATTCCAA AGCCACCAAT CCATTTNTG GATTTAATGT 180  
GTCTGTGGCT TAATAATCAT AGTAACAACA ATAATACCTT TTTNTCCATT TTGCTTGCAG 240  
GAAACATACC TTAAGTTTT TTTGTTTGTT TTTGTTTTNG TTTCCCTTA 300  
TGANGAAA 308

SEQ ID NO:3460

LENGTH:351

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04070

SEQUENCE DESCRIPTION:

GATCAAGCAG AGAAANTAAAT TAATTCATG GGACTAAATG AACTAGTGAG GATAATATTT 60  
NCATAATTNT TNATTTGAAA TTTGCTGAT TCTTTAAATG TCTTGTTCAG CAGATTCA 120  
GAAACTTTT TCCTTTAAG CTATCCACAG CTTACAGCAA TTTGATAAAA TATACTTTG 180  
TGNACAAAAAA TTGAGACATT TACATTCCT CCCTATGTGG TCGCTCCAGN NCTTGGAAA 240  
CTATTCAATGG AGTATTNTA TTGTATGGTA ATATAGTTAT TGCACAAGTT CANTAAAANT 300  
CTGCTCTNTG TATAGCANGG NNNGGGTGG GGGGGCGGGN GGNGGGGGGG N 351

SEQ ID NO:3461

LENGTH:305

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04071

SEQUENCE DESCRIPTION:

GATCAGATAG TTTCCTGAGG CTAATGCC CCAACATGTA AAAGACTGCN ACAAGGGTTA 60

01152

2153480

ATGAGCCAGG AACTGCGGAT GGTAACCTAC ATCTCTATAA TTACCATAGG ATATATATGA 120  
GTACCATAGG ATTCTTTGC ATAACGTAG AAAGTACAGA CAACACCCCTC CCGTGTTC 180  
TATTAGAGTT TTTANTGTTG ATTGGAAAAT GGGAGATTCA CTGTGTGCCA TTCTGGTAT 240  
ACGTTGANGA AATTACATCA CTAGTACACA CNGNGGNNT TCCACATTCA CACGCCAG 300  
CTCTN 305

SEQ ID NO:3462

LENGTH:303

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04072

SEQUENCE DESCRIPTION:

GATCAAGCTA CAGATATGGG ATACAGCAGG CCAGGAGCGA TTTCACACCA TCACAACCTC 60  
CTACTACAGA GGCGCAATGG GTATCATGCT AGTATATGAC ATCACCAATG GTAAAAGTTT 120  
TGAAAACATC AGCAAATGGC TTAGAAACAT AGATGAGCAT GCCAATGAAG ATGTGGAAAG 180  
AATGTTACTA GGAAACAAGT GTGATATGGA CGACAANNGT GTTGTACCTA AAGGAAAAGG 240  
TGANCAGATT GCNNNGGAGC ATGGTATTAG GTTTTTGAG ACTAGTGCAA ANGNGGTAT 300  
AAN 303

SEQ ID NO:3463

LENGTH:303

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04073

SEQUENCE DESCRIPTION:

GATCCGGTCA TACATCCACA TCAGGCCTGG CCAGCTGGAT GTTCTAAAN AGTCCACAA 60  
GCAGATTACT GCACGGGCAA CAAAGGATGG GACTTTGTC ATTCAAAGA CATGATGTAT 120  
GGGGATTAGA AAGAACTCAA GACACTCCTG CTTGATACAG AACAAAAAGA GCTAACAGG 180  
ACCAACAGGG CTTAAGCCCA GACTTGACGT AACAGAAATG TGCCAATAGG TAATAGGTA 240  
TTTNCTTC TCTGACTTGT TTTGTTTCT TGAAATAACA CTGTTGTGTG GCTAGAAAGG 300  
AAA 303

SEQ ID NO:3464

LENGTH:348

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04074

SEQUENCE DESCRIPTION:

GATCTACTTT CACATTCTCA AGTTTTNTC ATCTGCATTA GAGGTGCCA GTAGGTTCCC 60  
AGGTTCCAGC GTGCCCTCC CTCAGACACA CGGACACAAT CAGCCGAGAA GTTCCGGTC 120  
TGAATCACGA GAATGTGGAG GGGTGGGGGG TGTCAGTGGA AAGGCATAAG GCTGAGCTGA 180  
GACCAGTTGC TGGTAAACT GGGCAATCT GGGGAGGGGA ACATCCTGC CAGGGAGTTT 240  
CTGAGGGTCT GCTTTGTTA CCTTCGTGC GGTGGATTCT TTTTAACCTC GTCTACCTGG 300  
CGTTTGTAA GAAATGTCAG ATAGGAAAAT AAAAACATT TGAGTAAA 348

01153

2153480

SEQ ID NO:3465

LENGTH:299

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04075

SEQUENCE DESCRIPTION:

GATCTGACCT GGTGAGAGTTA TTTCTNATGA CCTCATAAA AAATAAACAN TTCCCAATGT 60  
TCCAGGTGAG GGCTTGAAA GGCTTCAAA ACAGCTCCGT CGCCCCTAGC AACTCCACCA 120  
TTGGGCAC TG CCATGCAGAG ACGTGGCTTG GCCCAGAATG GCCTGTGCCA TAGCAACTGG 180  
AGGCGATGGG GCAATGACAG ATACANCAGA ACANTGCTTT TGAGGCANGC TTCTTCCCTN 240  
GNNGGTNGGT TGTNATGGCC NTGGCTTTT NAGTTGGGNG NCATTANAT TAAGGTTN 299

SEQ ID NO:3466

LENGTH:415

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04076

SEQUENCE DESCRIPTION:

GATCTACGTN ATCTCAGGGC AGTTCTACA GATGAAGCAA GAGCTTTNC AGAAAAGAAT 60  
GGTTTGTNAT TCATTGAAAC TTGGGCCCTA GACTCTACAA ATGTAGAACG TGCTTTTNA 120  
ACAATTTAA CAGAGATTG CCCGATTGTT TCTCAGAACG AAATGTCAGA CAGACCGCAA 180  
AATGACATGT CTCCAAGCAA CAATGTGGTT CCTATTCTG TTCCACCAAC CACTGAAAAC 240  
ANGCCAAAGG TGCACTGCTG TCAGAACATC TAAGGCATT NTNTTCTCC CTAGAAGGCT 300  
GTGTATAGTC CATTCCCAG GTNTGNGGAT TTAAATATAT TNGTAATNCT NGGTGTCACT 360  
TTTGGTGT TATNACTTCA TACTTATGGN TTTTCCATG NCCTAAGNCT TTTTN 415

SEQ ID NO:3467

LENGTH:295

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04077

SEQUENCE DESCRIPTION:

GATCCACCTT CTTCTCTAGG TCCCCTCCTC CATCAGCAAA GGAGCACTTC TCTAATCATG 60  
CCCTCCCGAA GACTGGCTGG GAGAAGGTTT AAAAACAAAA AATCCAGGAG TAAGAGCCTT 120  
AGGTCACTTT GAAATTGGAG ACAAACTGTC TGGCAAAGGG TGCGAGAGGG AGCTTGCT 180  
CAGGAGTCCA GCCGTCCAGC CTCGGGGTGT AGGTTCTGA GGTGTGCCAT TGGGGCCTCA 240  
GNCTTCTCTG GTGACAGAGG CTCAGCTGTG GCCACCAACA CACAACCACA CACAN 295

SEQ ID NO:3468

LENGTH:292

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04078

SEQUENCE DESCRIPTION:

GATCAAAGCA CTGGGCTTGT CCAGGCNCAT AATAAATGCT CCATTGAANG TACTATTCTN 60

01154

2153480

GTTTCCACT GCTGTGGAAA CCTCCTTGCT ACTATAGCGT CTTATGTATG GTTAAAGGA 120  
AATTATCATG GTGAGAGAGA TGAGCAACGT TGTCTTNCT CTCAAAGCTG TAATGTGGGT 180  
TTNGTTTAC TGTATTGTTG TTGTNGTTG TATCCTTTTC TCCTNGTNAN TTGCCCTTCA 240  
GAATGCACCT GGGAAAGGCT GGTCCTTAG NNNCCTGGTT TGTGTCTNTT NN 292

SEQ ID NO:3469

LENGTH:291

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04079

SEQUENCE DESCRIPTION:

GATCTCTAA GAGATGATGG ACTTATGTAT GTTACAAGAC TTCGAAATGT TGGAGTCAA 60  
GTNGTTCATG AACATATTGA GGATGGAATT CATGGAGCTT TATCATTATC GACTTCACCA 120  
TTTATTAC GTCTAGGTCT TAGGATAAGA GATATGTATG TAAGTNGGCT GGATAAGANT 180  
TTATAAATAT GTGATGTGA TGTATAGCCC TTACATAGTG GATTGTAATT NGTGTATTT 240  
TGTGGTTTG GAGCAAAGAN CAATGTCATT TGAGTTATCT AAATCTACAT N 291

SEQ ID NO:3470

LENGTH:290

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04080

SEQUENCE DESCRIPTION:

GATCTTTGA TTCCTCTTGG GCTGAAGCAG ACCAAGTTCC CCCCAGGCAC CCCAGTTGTG 60  
GGGGAGCCTG TATTTTTTT ACAACACATCC CCATTCCCCA CCTGGTCCTC CCNCTCCCA 120  
TGCTGCCAAC TTCTAACCGC AATAGTGACT CTGTGCTTGT NTGTTAGTT CTGTGTATAA 180  
ATGGAATGTT GTGGAGATGA CCCCTCCCTG TGCCGGCTGG TTCCCTCTCC TTTCCCTG 240  
GTCACGGCTA CTCATGGAAG CAGGACCAGT AAAGGGACCT TCGATTAAAA 290

SEQ ID NO:3471

LENGTH:287

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04081

SEQUENCE DESCRIPTION:

GATCCAAAGT CCTGTGGTTA ACGCCTTCAT TTATAGATGA GGCAGCTGAG GCCTGGGGAT 60  
GTGAAACACC TGCTCACAGT CCTCATTTAC TGGATTTGAC TTCAGCCAGG TGAACCTGGAA 120  
TGCCTGGGG CGTGGAAAGGG CATTAGGAGT GTTCTATTG ATATGTGAAT GCTCATTTAA 180  
AAATGTCAAG GAATGAAGAA CAGCANCCTCT CAGTGGTGC TGCATTTATA ATTATTTATG 240  
TGAAAGTCAA ATTCAATGTAC AGTAAATTG TTATAAGAAT ATTCAAA 287

SEQ ID NO:3472

LENGTH:287

TYPE:nucleic acid

TOPOLOGY:linear

01155

2153480

CLONE:HUMGS04082

SEQUENCE DESCRIPTION:

GATCCAAAGT GCAAGGNTTT GATTATAAAC ATAATTCCT AGACTGAAAG TTTTGAAA 60  
AGATGCAGGG TCTGAGTCAG GCCTCTGGT TATATTGTGC AGTTCAAAA GAACTATTAA 120  
ANACTCTGA AACTCATGT AAATAAAAAT CATAGGGTGA AAATTGTATT TGTTAAAATA 180  
CCTTAATAAT TTAAAATGAC CTGATTCCT GGAAAATTAA ATTATTCAAAGGTGGAGGC 240  
ATTGTAAAAA GGAAATAGTG ATGTAAATAA ACATGTTCTC TTTCAA 287

SEQ ID NO:3473

LENGTH:278

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04083

SEQUENCE DESCRIPTION:

GATCTGTTG TCACTGACAG ACTGTAGTAG TGTCTGTGTG CTGACTGATA GATAGACTAT 60  
AGTAAAATTT GGGTGTGCCC TGACTAACCGG TCTAGGGTCT GTAAGCTGAC AGTCTGCCTG 120  
CTTTCTGATT GTATCCATTG AAGTGTATGT ACATTATGGT AATNCTCTGT CTATTAATG 180  
TGTCTAACAA AGGAAGGAAT TAAGCACTCC ACATGTTTC TTTATAGGGG AGTTCTGTAC 240  
ACTATGATT TAAATAGATA TTTCTTATAT AANGGAAA 278

SEQ ID NO:3474

LENGTH:278

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04084

SEQUENCE DESCRIPTION:

GATCCAACA CTGAAGGGGT AGAAGGCCAG GGGGGCATGG AGAGTCAGC TCCATTATAG 60  
TGAAGGCCA AACATATGTN AACTGTTGC TGTGTGGAGG TGTTAGTTCT GCTGCCTACC 120  
ATCTTCATCT CTAGCACCTC CCCTGCCAAG AGTCAACCAC TAAGCAATCC CACCCAAAGCC 180  
TGGATGCTTC TAGAGGGGCC CACTCCCAGC TGGGAGAGTN TAGGGATAT GCTCACACCA 240  
CATTAGCAGC ACCAATAAA AATGCTGGAA ACAAGAAA 278

SEQ ID NO:3475

LENGTH:277

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04086

SEQUENCE DESCRIPTION:

GATCTTAACG GTGTCAATTG AAACCTGTG CGTTGAAGT GGTGGAGACA GGACCTTTAT 60  
CATATTCTGA GCTTTAAATA TATAAACNGG TAAATCATTC CATTAAATAA GACATAGCCC 120  
AAGTCCCAGA ACGCGTTTG AGAGTAACCA GAAACAGAGGG TTATTTGTTC TGCTTTCTT 180  
TATCACTGCT ATTGGATGGG ATATCCAAA CAAGTGGATG TGCGCCCCAA TTCTATTTC 240  
CACTATTCAA TGATTAAT AATTACAAA ACGCAAA 277

SEQ ID NO:3476

01156

2153480

LENGTH:273

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04087

SEQUENCE DESCRIPTION:

GATCTTCCA AATACCCAAA TGTCCTGCA AGCCCGTTAA ATAATCCCT ATGCTACCCCT 60  
TAATAACATA CAATGACCAC ATAGTGTGAG AACTTCCAAC AAGCCTCAAA GTCCCTTGAG 120  
ACTCCCCAAT ACCTAATAAG GCATGCGAAA TGTTCTCATG AACTACCCCA CAACACGCC 180  
AAAACCTCAAA ACACCCAAAA ATATNTCCCTC CAATGTCCCTG AAACATGAAC CCAAAAAGAG 240  
ACCCACAATA AACTCGTGAC TTGTCCCNTC AAA 273

SEQ ID NO:3477

LENGTH:272

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04088

SEQUENCE DESCRIPTION:

GATCCTCTCN ACCCTCCTCT AGCCATCCCT TGGGAAGGG TGGGGAGAAN TATAGGATAG 60  
ACACTGGACA TGGCCATTG GAGCACNNNG GCCCCACTGG ACAACACTGA TTCCTGGAGA 120  
GGTGGCTGCN CCCCCAGCTT CTNTCTCCCT GTNACACACT GGACCCACT GGCTGAGAAT 180  
CTGGGGGTGA GGNGGACAAG AAGGAGAGGA AAATNTTCC TTGTGCCTGC TCCTGTACTN 240  
GTCCTCAGCT TGGGGNTTCT TCCTCCTCCA TN 272

SEQ ID NO:3478

LENGTH:270

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04089

SEQUENCE DESCRIPTION:

GATCTTGATA TTNGGCCTCT TTGAAGAGAC AGCCCTGGCT GCTTCCCTNN CCTACTGCC 60  
TGGAAATGGGT GTTNCTCTTA GGATGTATCC CCTCAAACCT ACCTGGTGGT TCTTGCCTT 120  
CCCCTACTCT CTTCTCATCT TCGTATATNA CGAACGAGAA AACTCATCAT CAGGCACGC 180  
CCTGGCGGCT GGGTGGAGAG GGAAACCTAC TATNAGCCCC CCGTCCTGCA CGCCGTGGAG 240  
CATCAGGCCA CACACTCTGC ATCCGACACN 270

SEQ ID NO:3479

LENGTH:267

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04090

SEQUENCE DESCRIPTION:

GATCACCAAC AGGGAAAGAC ATCCGGTTC TTTGATGTG GTGCATGTGA AGGATGCCA 60  
TGGCAACAGC TTTGCCACGA GGCTTCCAA CATTGGTGT ATTGGCAATG GCAATAAAC 120  
TTGGATTTCCTGCCCCAGGG GAAAGGGCAT TCGACTTACT GTTGCTGAAG AGAGAGATAA 180  
GAGGCTGGCC ACCAACAGA GCAGTGGCTA AATTGCAGTA GCAGCATATC TTTTTTCTT 240

01157

2153480

TGCACAANTA AACAGTGAAT TCTCAAA

267

SEQ ID NO:3480

LENGTH:263

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04091

SEQUENCE DESCRIPTION:

GATCCCTGGA GTGCCCTGGT GTTCAAGCC CCTGCAGGAA GCAGAATGCA NCTNTGAGG 60  
CACCTCCAGC TGCCCCCGGC CGGGGGATGC GAGGCTCGGA GCACCCCTGC CCGGCTGTGA 120  
TTGCTGCCAG GCACTGTTCA TCTCAGCTTT TCTGTCCCT TGCTCCCCGC AAGCGTTCT 180  
GCTGAAAGTT CATATCTGGA GCCTGATGTC TTAACGAATA AAGGTCCCAT GCTCCACCCG 240  
AGGACAGTT TTCGTGCCTG AAA

263

SEQ ID NO:3481

LENGTH:257

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04092

SEQUENCE DESCRIPTION:

GATCGGGAAC AAATGNAATC TGTTGATGCA TCAAGCTATC GTCAGTCAAA CCCCTTTAAA 60  
ATGTTGCTT GGCTTTGTA ATTAAATAT GTAAGTGCTA TATAAGTCAG GAGCAGCTGT 120  
CTTTTTAAAA TGTCTCGGCT AGCTAGACCA CAGATATCTT CTAGACATAT TGAACACATT 180  
TAAGATTGAA GGGATATAAG GGAAAATNAT ATGAATGTGT ATTTTACTC AAAATAAAAG 240  
TAACTGTTA CGTTAAA

257

SEQ ID NO:3482

LENGTH:255

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04093

SEQUENCE DESCRIPTION:

GATCTACATT TTGTACATAT TTATATAAAA TTTACCTTA AGTATTTACT TTAAAAAATT 60  
TAATGGCTTA ACTCGAACTT GAAGACACAT ACTTCAACTG TCCTTATTGT CCATTAANCT 120  
GATAATTTN ATTTCTNG CTTTTATAGA TTTNNCTATA TAGGAATCAA GATTANGAA 180  
ATTTTGCAATT AAAANTAGTG TACCAATGCT TCATATACGT TAGTTATTG CTATTATGTA 240  
GGGAAGAGGA TTGTN

255

SEQ ID NO:3483

LENGTH:255

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04094

SEQUENCE DESCRIPTION:

GATCTGAAAT NAGAAATATC CAACATTGCA CGAGTATCTT TNTTTATNCC TCCACAGACT 60

01158

**2153480**

CCGCCAGAGA CACCTAGTCC TGATGAAACG TCTGCTCCTT GTCCTAATAT TCATATCAAC 120  
AGCACCATTC CTGGCATTCA CATTTTAAAA ATTATGTGGA AGTGGATAGG AGAACTGCAG 180  
CTGTCAATAG CCTAGGGCTG AATTTTGTC AGNTAANTAA NATAAATCAT TCATCCTTT 240  
TTTNGNTTT ATAAA 255

SEQ ID NO:3484

LENGTH:253

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04095

SEQUENCE DESCRIPTION:

GATCTAGGTG GTTTGTAATT GTGCATTACT GACTGCATAT GTTTGTGTAT GTGTAAATGT 60  
GGGCTCCCTG TTAAGTGGGG CTCATGGATA CGAGGCCTGA GGAAGTGTGG CTTGCTAGTC 120  
TGTTACGTTA ACATGCTTT CTAAAATTGC TTCACGTGTT AATTCAATT TA CTCCTGCATT 180  
CATTGACTGT TTTTGTCTT TTCCATTACAC TTTGTACTTA TTTTTTCAT TAAATTTGC 240  
ATTTATTTG AAA 253

SEQ ID NO:3485

LENGTH:251

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04096

SEQUENCE DESCRIPTION:

GATCCTAGTT CCTCCTTCC CGAGTGATAC CCATGAACTG CCAGTAGAGG CTGCTATCGT 60  
TCCATGTGTA AGGAATGAAC TGGTTCAAGG CGCGTCCCTAC CCAGTCATTT TCTTTACCTT 120  
ATACTAATTC TTCCCTGAATA ATGTCTTCAG TTTCTTGAGG AGACTCCTAG TTTTGGTTTT 180  
CAAATTACTT GGAGGGCTGC CTAGGAATCT ATCTCCCTCT GAAATAAAGT TTCCCTCATCT 240  
TCCACNNNTAA A 251

SEQ ID NO:3486

LENGTH:249

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04097

SEQUENCE DESCRIPTION:

GATCATACGG CCTTCAGGA GACGCTGGGA TGTAAGATAC TCTTGGAGGN TGGCTCTGAA 60  
CTCGGGTGTC TGAATCACAG GGCAAGGGTA GGCGTGGGCT GTGGCTAACCA GCAGAGTCAC 120  
TTCCCTGGCC TAGCTGGGG ACCTGGGGAG GAGGAGGTAG CTCTGGACAC CAGGGTTCTT 180  
CCCATTGTGG GAGAGTNAGT TTTTGGGG GAGACCTGTC CCCAGATTA AAGAACTGGG 240  
AGCCCTAAA 249

SEQ ID NO:3487

LENGTH:248

TYPE:nucleic acid

TOPOLOGY:linear

**01159**

2153480

CLONE:HUMGS04098

SEQUENCE DESCRIPTION:

GATCAAAGAA GAGAGTAAAG CTATGCTTC AATTAAATT CAATACCTGA TTTGTACTT 60  
CCTTGAAAGC TTACTTTAA AATACCTTAC TTATAGGCCT GGTGTATGC TATAAGTATG 120  
TACATACAGT TTCACCTCAA AAATAAAAAA AAANTCCCTA AAANCTCTCT ATACTCTCTA 180  
TAACANTNCT TTATCANGAN CTCTGGNCAA TGGTATTATT TNGGANANTC ATGGTGATGT 240  
ATTTNTNN 248

SEQ ID NO:3488

LENGTH:245

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04099

SEQUENCE DESCRIPTION:

GATCTGTGTT GTAGAACATG AGGGGTGTAAG CCTTCAGCCT GGCAAGTTAC ATGTAGAAAG 60  
CCCACACTTG TGAAGGTTT GTTTACAAA TCACTTGATT TAACACACTC AGGTAGAATA 120  
TTTTAATTTC TACTGTTTA TACCCAGAAG TTATTTCTAC ATTGTNCTAC AGCAAGAATA 180  
TTCATAAAAG TATCCCTTC AAATGCCCTT GAGAAGANTA GANGAAAAAA AGTTTGATA 240  
TATTN 245

SEQ ID NO:3489

LENGTH:246

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04100

SEQUENCE DESCRIPTION:

GATCCTGATN ATATTGGCA GCTGTCTCC AGTCTAAAAA GGTTTGATGA CAAATACACC 60  
TTGAAGCTGA CCTTCATCG TGGGAGAAC AAGCAGCAGC GGGAAAGCCGA GTTCACAAAG 120  
TCCATTGCTA AGTTTTTTG ACCACAGTGG GACACTGGTC ATGGATGCAT ATNGCCTGA 180  
AATATCCAGG CTCCATGACA GTCTTGCCAT AGAAAGANAA ATAAAGTAGC CACTTCTANA 240  
AGTAAA 246

SEQ ID NO:3490

LENGTH:239

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04101

SEQUENCE DESCRIPTION:

GATCCTGGGT ACTGAAAGNC TTAGGGAAGC TGGCCTGAGA GGGGAAGCGG CCCTAAGGGA 60  
GTATCTAAGA ACAAAAGCGA CCCATTAGA GACTGTCCCT GAAACCTAGT ACTGCCCCCC 120  
ATGAGGAAGG AACAGCAATG GTGTCAGTAT CCAGGCTTTG TACAGAGTGC TTTTCTGTTT 180  
AGTTTTACT TTTTTGTTT TGTTTTTTA AAGATGAAAT AAAGACCCAG GGGGAGAAA 239

SEQ ID NO:3491

LENGTH:239

01160

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04102

SEQUENCE DESCRIPTION:

GATCTGGGA AAGGAGAGAC CATGGTGTGA ATGTAGAGAT GCCACCTANC TCTCTCTAAG 60  
GCAGGCCGTG GGATGAAGGA GGAGGGTCAG GGCTGGCCTT CCTCTGNCA TCANTCTGCT 120  
AGGTTGGGG CCCCGNCCN NCCATACCTA CGCCTAGGGA GCCCCTCCTC CAGTATTCCG 180  
TCTGTAGCAG GAGCTAGGGC TGCTGCCTCA GCTCCAAGAC AAGAATGAAC CTGGCTGTN 239

SEQ ID NO:3492

LENGTH:244

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04103

SEQUENCE DESCRIPTION:

GATCTGTGTT TCATCCCCAG TCATCTTCT TGTTCCAGAG AGGTGGGGCT GGATGTCTCC 60  
ATCTCTGTCT CAACTTTATG TGCACTGAGC TGCAACTTCT TACTTCCCTA CTGAAAATAA 120  
GAATCTGAAT ATAATTGT TTCTCAAAT ATTTGCTATG AGAGGTGTATG GGATTAATTA 180  
AATAAGTCAA TTCCTGGAAT TTGAAAGAGC AAATAAGAC CTGAGAACCT TCCAGAACATCT 240  
GAAA 244

SEQ ID NO:3493

LENGTH:235

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04104

SEQUENCE DESCRIPTION:

GATCCATAAA AGATTGTATT TTTATTACTA TTTAAACAAG TGATTAATT TAGTCTGCAC 60  
ANNNAGCAAG GGTCACATG CATTCTTTA TACTGCTGGA TTTTGTTGTG CATCATTTAA 120  
AACATTTGT ATGTTCTNC TTATCTGTGT ATACAGTATG TTCTGAATG ATGTTCATTT 180  
GTCAGGAGNN CTGTGAGAAA TAAACTATGT GGATACTGTC TGTTATATT ATAAA 235

SEQ ID NO:3494

LENGTH:233

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04105

SEQUENCE DESCRIPTION:

GATCGACTGT AAATAGAGGA CTTCTGGAAC ATTCAAATA TTCTGGGGTT GAGGGAAATT 60  
GCTGCTGTCT ACAAAATGCC AAGGGTGGAC AGGCGCTGTG GCTCACGCCCT GTAATCCCAG 120  
CACTTTGGGA GNCTGAGGTA GGAGGATTGA TTGAGGCCAA GAGTTAAAGA CCAGCCTGGT 180  
CAATATAGCA AGACCACGTC TCTAAATAAA AATTANTAGG CGGGCCAGGC AAA 233

SEQ ID NO:3495

LENGTH:243

01161

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04106

SEQUENCE DESCRIPTION:

GATCATGGAG ACCTGGCTGG TAGCTGTAAC AGAGATGGTG GAGTCCAAGG AAACAGCCTG 60  
TCTCTGGTGA ATGGNACTTT CTTGGTGGA CACTTGGCAC CAGCTCTGAG AGCCCTTCCC 120  
CTGTGTCTCG CCACCATGTG GGT CANATGT ACTCTCTGTC ACATGAGGAG AGTGCTAGTT 180  
CATGTGTNCT CCATTCTGT GAGCATCCTA ATNNNTCNNT TCCATTTNA TGACAGGANG 240  
AAA 243

SEQ ID NO:3496

LENGTH:231

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04107

SEQUENCE DESCRIPTION:

GATCCAGAAC TGAGGTCACT GGGTTCTAGA ACNGNNACAT TTACCTCGAG GCTCTTCCAT 60  
CCCCAAACTG TGCCCTGCCT TCAGCTTTGG TGAAAGGGAG GGCCCCTCAT GTGTGCTGTG 120  
CTGTGTCTGC ACCGCTTGGT TTGCAGTTGA GAGGGGAGGG CAGGAGGGGT GTGATTGGAG 180  
TGTGTCCGGA GATGAGATGA AAAAAATACA TCTATATTTA AGAATCCAA A 231

SEQ ID NO:3497

LENGTH:231

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04108

SEQUENCE DESCRIPTION:

GATCTGCAGC CAGGCCCTTC TGAAGGNNTT ATTCTGNTAA AAATGGTCTN AGTTNTCTGA 60  
AAAGCCAGCT CTTGAACCTC TTCACAAACAG TATCAACACT GGCTTCTCCC GGTTCATNTT 120  
ATGCCTGCGA GAAGTCAGTG GTAATNCTG CAGGGCTTAA TACATTAGTG GTAATGGTT 180  
TAAAAAACAA AGACTGTAAG CCTGTGTGTG CCACTGNNNG CTTCAACNGN N 231

SEQ ID NO:3498

LENGTH:224

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04109

SEQUENCE DESCRIPTION:

GATCCCAGTT TGCAGCAAAC CCCACACCCC AGCTCACACA GCAAAACAA TGGACAGGCC 60  
CAGAGGGTGA AGCAAACAGT GTCCCTCTG GCTGTNTTGG AGCCTCCCCA GTAACCACCT 120  
ATTTATTTNA CCTCTTCCC AAACCTGGAG CATTATGCC TAGGCTTGTN AAGAATCTNT 180  
TCAGTCCCTC TCCTCTCAA TAAAAGCATC TTCAAGCTTG TAAA 224

SEQ ID NO:3499

LENGTH:294

01162

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04110

SEQUENCE DESCRIPTION:

GATCGGGAAAC AAGCACGTTG TACCCCTGGC TGGACATGGC CAAGACACAA GGCATTCCAC 60  
GGCGGCAAGC TGACCGCACA GCAGTCTGGC TTGATTTCA GCCGTATCA TTGGGTTCTG 120  
TTTGACAGC TCTGCTGCC ATAGGGACTG CGACTGGGN CAGGTCAACC ACGCCAGGGG 180  
GGTGTACCCA GCCTTTCTT TTTNCTTC TTTNTTTT TTCCCCCTA AAGTTGTNNN 240  
AAAGCNAANC CNTGGGAATA ATGGTTNTT TGGANTNAAA CCCANNATT CAGN 294

SEQ ID NO:3500

LENGTH:221

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04111

SEQUENCE DESCRIPTION:

GATCCAAGTT TGATAACATT GGCAATGAATG CCATGGCTAA CAAAGATAAT GCAAGTNTCA 60  
AACAGCTTAG ATGGGAGGCT AACCGTGATG ACTGGCTACA CAACAGAGAT GCAAAANGTA 120  
TCATCAGGAA AAGGAAACAT TTTAAAANGA AGAGGNTAA AACCACTCAA AAANCTAAAA 180  
NCCAAGGGAA ATGAGTTATT ANTGTAAANT ATAGNTTAAN N 221

SEQ ID NO:3501

LENGTH:220

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04112

SEQUENCE DESCRIPTION:

GATCTAATTG TATTAGTATT GTGAATAATC ATGTGAAATG TTTTGAGACA GAGTACTATA 60  
TTTGTGAATA TAATNNATG GTTTTTCA CTTAGAACCT TTCTGTGTGG AAAACTAAGA 120  
AAATTGCTTT CTGCTGTATA ATCTGGCATT CATTGTAGAT TAAAGCTTAT TTNCTGTGA 180  
ATAAAAACGN NNCAATAAAA TACTATTCTT TAAAATTAAA 220

SEQ ID NO:3502

LENGTH:226

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04113

SEQUENCE DESCRIPTION:

GATCTGGACA CCCTGTCTCC TGAGGGAGCGC CGGGCCAGGC TGCGGAAGTN TGAGGCTCAG 60  
CTCCAGTCGA GGAAGGAGTA CGAGCAGGAG CTCAGTGATG ACTTGATGT GGAGCGCTAC 120  
CGACAGTTCT GGACCAAGGAC CAAGAAGTGA CCGTGGCTCC AGCCACCCCG GGACATTGCT 180  
AAGATGGGAG GGCTGTTCTT AAATNACTCG TTCTTGAAGC TGCAA 226

SEQ ID NO:3503

LENGTH:215

01163

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04114

SEQUENCE DESCRIPTION:

GATCATGCCG AAAAAGTGGC GGAAAAGCTA GAAGCTCTCT CGGTGAAGAN GANCCAAGG 60  
AGGATGCTGA GGAGAAGCAA TAAATCGTCT TATTTNATT NCTTTCCCTC TCTTCCTTT 120  
CCTTTTTNA AAAAATTAA CCCTGCCCT CTTTTCGGT TTGTTTTAT TCTTCATTT 180  
TTACAAGGGA CGTTATATAA AGAACTGAAC TCAAA 215

SEQ ID NO:3504

LENGTH:213

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04115

SEQUENCE DESCRIPTION:

GATCTNTCT TAATGTACAT AGTGCTAAC A TGAAGACCTT TTTNTGCACT ATATGCAAAC 60  
AGGGTAACTA ACTAAAACAA AGCCACTTTC AATCTTCAAT CCTTGAAGGT ATATCTAGGT 120  
TTATNACAGT AATTGNTTT ACATTTNATG GTGCCTAGTA TTGACAAAAT GTTATTTCCC 180  
TACATTAAC ATGACTCCAT AGACCTTTTC AAA 213

SEQ ID NO:3505

LENGTH:212

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04116

SEQUENCE DESCRIPTION:

GATCTAATGT AAAATCCAGA ACTTGGACTC CATCGTAAA ATTATTTATG TGTAACATTC 60  
AAATGTGTGC ATAAATATG CTTCCACAGT AAAATCTGAA AAACGTATT GTGATTGAAA 120  
GCTGCCTTC TATTTACTTG AGTCTTGTAC ATACATACTT TTTTATGAGC TATGAAATAA 180  
AACATTTNAA NCTGAATTNN TTAACNTGA AA 212

SEQ ID NO:3506

LENGTH:211

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04117

SEQUENCE DESCRIPTION:

GATCAGAGAT GCTGTCAATC AGTCCCAACA AGATGGCCTA GAAATCGCAT TCTCACCTCG 60  
CCTTGCTGCT GCTTTAATTC CAAGTTCTAT TTCTTCCCTT ATAGTTTCT ATGGGAATGA 120  
GGCGGATACA GGAAACACCC TATCTCCTCT GTATTTTGT AGTGGAAATT CTATTAAGG 180  
GGCTCATTAA AGCATAGTAT TTATACACAA A 211

SEQ ID NO:3507

LENGTH:209

TYPE:nucleic acid

01164

2153480

TOPOLOGY: linear

CLONE:HUMGS04118

SEQUENCE DESCRIPTION:

GATCGAGATN CAAAGCCACA TNCTCTCTCA CCAAGNTAAA CTATTANAT TAATTGTTAG 60  
CGGTGTATG CTGCTTCTT CTTTGACAAG GCCATGACTA AGAAGGCTCT AAGTAAGGAA 120  
AGAACATTT ATTCCATAGT CAGCTAACTG GTAGCAAAGC CTTCTNTTCC AAGACACCAA 180  
GGGAGAGGGG AGGACATAAA TTATGCAAA 209

SEQ ID NO:3508

LENGTH:208

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04119

SEQUENCE DESCRIPTION:

GATCCCCTCT TNAGTCCNCT GCCCCTTCCA AGGACACTAA TGAGCCTGGG AGGGTGGCAG 60  
GGAGGAGGGG ACAGCTTCAC CCTTGGAACT CCTGGGGTTT TTCCTCTNC GCCCCTTGTG 120  
GTTTCTGTT TGTAATTAA GAAGAGCTAT TCATCACTGT AATTATTATT ATTTCTACA 180  
ATAAAATGGGA CCTGTGCACA GGAGGAAA 208

SEQ ID NO:3509

LENGTH:322

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04120

SEQUENCE DESCRIPTION:

GATCCAAGCA TATAAAAGC CTNTATATT TTNAAAAACA CATCTTAAC CCACCGTTA 60  
CGATATTATA AAAGTGTAAAT GTTCTCTT GGTAAAGGATA TTTGCTACA AGTGCTAGGA 120  
AATAACTNNC TGATAGCTGC GTTAACATAC TTNGTTTGC CTAGAGAGGG GCAATAAAAA 180  
TGAACCAAAAG GATATTCCA GAAAGGATTA AGAAAAGCTGT TTAAGANGGC CATGACTCTT 240  
TAGGTGTGTA TGTGTACCTT TCAGCATCCT AGGAATTNN ATACTAAAAG CAAAATGTTT 300  
TTCCCAGTTA GTCTCTTCA GN 322

SEQ ID NO:3510

LENGTH:205

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04121

SEQUENCE DESCRIPTION:

GATCCGNCCA CCTNGGCCTC CCAAAGTGCT GGGATTACAG GTGTGAGCCA CCGTCCCCGG 60  
CCTCTTTAA TTTATNCCTA AAATATTACC TTGAGGCCAA ATNCTGCCT TAAGGAGAAT 120  
GTGCACCAAG TGCTGGGTG GGGGCTGGTT ATAAACGAGG CCACAAATNA TGCTTGAAA 180  
TAAATTGTGT GGTTCAAATC TGAAA 205

SEQ ID NO:3511

LENGTH:205

01165

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04122

SEQUENCE DESCRIPTION:

GATCCCTCAC TTTATTATA TTCCCACTAT ACCAGTAAG TTCATTCAT AGGCCCTATC 60  
ATGCATTAAT CATTGNATGN NAGNAGTTAA TGAAAACCTT TCCTGTTACA ACGCCCATTG 120  
CCGGCAATGA ACGTACCAAA ACCGCCAAGG AAGTCATTGT TATTGCACAA TACATGAGGA 180  
CCTGGAGCTT TTCCAAAAGC TTAAA 205

SEQ ID NO:3512

LENGTH:204

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04123

SEQUENCE DESCRIPTION:

GATCTAAAC GGCTATTTAA TATGTTACAA GGCACTTGAG TATGGTGCA TGTCAAATA 60  
TAAATGTTT TAAATTAAC TAAACATTTG GTTATAAAAG TTTANCCATA ATAATAGAAAT 120  
TTTAAACA CGNTTGTNTG GTTAATCTT AGCATATTT TCCAACTAAT AAAGCTCAGT 180  
ATTCGTCTGN GTTCTCAGNG GAAA 204

SEQ ID NO:3513

LENGTH:201

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04125

SEQUENCE DESCRIPTION:

GATCTCTCTC ATTCAATTCA ATGTATTTT ACTTTAAGAT GAACCAAAAT TATTAGACTT 60  
ATTTAAGATG TACAGGCATC AGAAAAAAAGA AGCACATAAT GCTTTGGTG CGATGGCACT 120  
CACTGTGAAC ATGTGTACCC ACATATTANT ATGCAATATT GTTTCCAATC CTTNCTAATA 180  
CAGTTTTTA TAATGTTGAA A 201

SEQ ID NO:3514

LENGTH:200

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04126

SEQUENCE DESCRIPTION:

GATCCAATT ACATCCACAT TTTAGGTNCA ACAGCAAGAA GTTCAGAGAG AGATTTCCA 60  
ACCAGACATT GGGTCACTCA CTGGTCACCT TGCCAGTNCA TTTTATTAGA AGGAATCTG 120  
TTGTAGCAAA TGGGAATAAA CCTGGGTTTC TATAGACCCA GAACTGAAAA AATAAACATC 180  
GTGCTGTTT TAATTNGAAA 200

SEQ ID NO:3515

LENGTH:209

TYPE:nucleic acid

01166

2153480

TOPOLOGY:linear

CLONE:HUMGS04127

SEQUENCE DESCRIPTION:

GATCTTAGTT TTCTTTGTT TATTTCCAG CTCATTTTT TCTTCTGGTC AGTTTTTTA 60  
AGGGGGGGTG TTGTGGTTT TTGTTTTGT TTTGCTTCTG AGAAAGCATT TGCGTTCTT 120  
CCTCTCCAA CATAACAATC GTGGAACAG AATGCGACTG CTNGATTAC CGATGTATT 180  
AATGTAAGTA AAAAAGGAA AAAAAGAAA 209

SEQ ID NO:3516

LENGTH:198

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04128

SEQUENCE DESCRIPTION:

GATCCATTCC CTGCACTNA AGATTCTAAG GAACTGGTT TCTCAGTATA CAATGGGAAT 60  
GGTTGGNAGG AGGTAAAGAG TAGAACAGAG TATCAAGANT CCAGAGCCCA GCACCTGTAG 120  
TCCTAACTAT NCANATTCCCT TGAGCCCAGG AGTTTGAGTC CAGCCTGGAC AACATATTGA 180  
GACCCCCATC TCTCTAAA 198

SEQ ID NO:3517

LENGTH:191

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04129

SEQUENCE DESCRIPTION:

GATCATGAAT AGGAGCCAT GCTAGAAGTA CATTCTCTCA GATTGAACC AGTGAATAT 60  
GATGTATTTC TGAGCTAAAA CTCAACTATA GAAGACATTA AAAGAAATCG TATTCTGCC 120  
AAGTAACAC CACTCTGCC TTAGATAATA TGATTATAAG GNAATCAAAT AAATGTTGCC 180  
TTAACCTCAA A 191

SEQ ID NO:3518

LENGTH:191

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04130

SEQUENCE DESCRIPTION:

GATCCAGGCA GCCAAGAACT TGATGAATGC TGTGGTGCAG ACAGTGAAGN CATCCTACGT 60  
CGCCTCTACC AAATACCAAA AGTCACAGGG TATGGNTCC CTCAACCTTC CTGCTGTGTC 120  
ATGGAAGATG AAGGCACCAAG NGNNAAAGCC ATTGGTGAG AGAGAGAAC AGGATGAGAC 180  
ACAGACCAAG N 191

SEQ ID NO:3519

LENGTH:187

TYPE:nucleic acid

TOPOLOGY:linear

01167

2153480

CLONE:HUMGS04131

SEQUENCE DESCRIPTION:

GATCTCCCC AAAGATTCCA GGCGGTGCAA CCCTGCNTGT TCGAGGTGGA GCTGCTCAAA 60  
ATAGAGCGAC GAACTGAGCT GTAACCAGAC TGGGGAGGGG CAGGGGGAGA GGCCCCCATC 120  
AGGGACCAGA CTGTTCCAGA AAAAAAACAA AAAACANAAA CAAACAAAAA AACACTTAAA 180  
AGCCAAA 187

SEQ ID NO:3520

LENGTH:184

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04132

SEQUENCE DESCRIPTION:

GATCGAGACT CTNCCAGAAA ACAAAACAAA ACAAAAAAAA ATCCGTTCT AAGGACGGCG 60  
GGGATTCGGT TCGAGCCGT GGCTGCTCTG TTTGTTTG CTTTCTTGGT ATATAATCCT 120  
ANAAATAAAA GGGTAATATA AATATTNAG AAGAGGGAAA TTGCTGAAGA GTAGTAAGGG 180  
CAAA 184

SEQ ID NO:3521

LENGTH:177

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04133

SEQUENCE DESCRIPTION:

GATCAGATGA CCATTGAGGA CTTGAATGAA GCTTTCCAG AAACCAAATT AGACAAGAAA 60  
AACTATCCCT ATTGGCCTCA CCAACCAATT GAGAATTAT AAAATTGAGT CCAGGAGGAA 120  
GCTCTGGCCC TTGTATTACA CATTCTGGAC ATTAAAATA ATAATTATAC AGTTAAA 177

SEQ ID NO:3522

LENGTH:220

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04134

SEQUENCE DESCRIPTION:

GATCCCATCC GAAGCTCAGG GTATGGAGAG CGGGGAGCTC CNCCAAAGAT TCCAGGCGGT 60  
GCANCCTGGT GTTCGAGGTG GAGCTGCTCA AAATAGAGCG ACGAACTGAG CTGTAACCAG 120  
ACTGGGGAGG GGCAGGGGGA GAGGCCCCCA TCAGGGACCA GACTGTTCCA AAAAAAAANC 180  
AAAAANCAA ANCAAACAAA AAAACACTTA AAAGCCAAA 220

SEQ ID NO:3523

LENGTH:172

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04135

SEQUENCE DESCRIPTION:

01168

2153480

GATCCTACCT AAGGGGCACA ACTAGTAAGG GAGTAGAGCT GAGATTGGCT CCAGAGTTCT 60  
TGTTCAGC CACCATTTA TGCTGCCTCT CCAGTNATT TTTTCCAT TTTCTTCAGT 120  
NTTCTATAG CAGAGATTG ATAATAAAAA GAAAATCCTA AACAAATGAGA AA 172

SEQ ID NO:3524

LENGTH:169

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04136

SEQUENCE DESCRIPTION:

GATCGCACTG CGCAGGGGTG CCACGGAGCT CACCCACGAG GACTACATGG AAGGCATCCT 60  
GGAGGTGCAG GCCAAGAAGA AAGCCAACCT ACAATACTAC GCCTAGGGCA CACAGGCCAG 120  
CCCCAGTNTC ACGGCTGAAG TCGCATAAA AAGATGGTTT AGGGTCAA 169

SEQ ID NO:3525

LENGTH:169

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04137

SEQUENCE DESCRIPTION:

GATCTCAGGC ATCGGATTAT TTCTCCTGTA AATATTCAG AATGTATCTN TCCAAGATGA 60  
GAGCTCATTA AAAGACAATT ACAAAAGCTTA TCACATCCAA AAGANTTATC AATAATTTN 120  
AAATATTATT AANC GTGTAA TAAATNTNCA AAGTNCCACT TGCCTTAAA 169

SEQ ID NO:3526

LENGTH:165

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04139

SEQUENCE DESCRIPTION:

GATCAAANG AGTNAANCTA TCCAAAAAAA ATTTGTATAT TTGGGAAAAA TGGATTTTA 60  
CATAGTTTT GTATGCAGAT ATAAAAGCTGT AATTATGAAT ATAGTGGCG TAGATAAACT 120  
CATAGCTTA AATTCTAAAA ANGAAAAAGC TTATACCANG ATAAA 165

SEQ ID NO:3527

LENGTH:165

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04140

SEQUENCE DESCRIPTION:

GATCAGCCGA TGACAGAGAT TGTAAGCCGT GTGTCGAAGC GAAAGTTGGA GCCGCCACGT 60  
GCGGGCNCTG GTGCTTNANC TGTGCTGTAA CGACGAGAGC GGCGAGGATG TCGAGNTTCC 120  
CTATGTCCGA NACACCATCC GCTGACCCCCG TNTGNTCCTN TAGGN 165

SEQ ID NO:3528

01169

**2153480**

LENGTH: 165

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04141

SEQUENCE DESCRIPTION:

GATCCATTG AAAGTNATT TGACATAAGG AGTAAGGTTA CTACTGATTC CTACTCAGGA 60  
GGCTAAANTG GGAGGACCAC TTAAGTATGG NAGGTCGAGG CTATAGTGAG CCATTACTGA 120  
GCCACTGCAC TACAATCTGG GCGACANAGC AAGACTCTGT CTAAA 165

SEQ ID NO:3529

LENGTH: 161

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04142

SEQUENCE DESCRIPTION:

GATCCTGTGT TTGCACTGG GGAGACAGAA ACTGTGGTTG ATAGCCAGTC ACTGCCTAA 60  
AACATTGAGTG TGCAAGATGG CCAGCACTGA ACTTTGAGA TATGACGGTG TACTTACTGC 120  
CTTGTAGCAA AATAAAGATG TGCCCTTATT TTACCTACAA A 161

SEQ ID NO:3530

LENGTH: 161

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04143

SEQUENCE DESCRIPTION:

GATCAGTCAT CCACCAAGGAA CGAACGTTTC CTGAAGAAGA CCTGGTCCT CTGGAGGTTG 60  
CGGTGGCTGA AGGATGCATC ATGTGCTCCT ACCCTGCTCT ACCGCTTTNT TGGGTACAG 120  
AGGCCAAATG TGAGAGCATT GAATAAATAT CTTAAGCTAA A 161

SEQ ID NO:3531

LENGTH: 159

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04144

SEQUENCE DESCRIPTION:

GATCTCGTGA AGCCCGCAAG GACCGAACAC CCCCCACCCCG ATTTAGACCT GCGGGTGCTG 60  
CCCCACGTCC CCCACCAAAG CCCATGTAAG GAGCTGAGTT CTTAAAGACT GAAGACAGGC 120  
TATTCTCTGG AGAAAATAA AATGGAAATT GTACTTAAA 159

SEQ ID NO:3532

LENGTH: 386

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04145

SEQUENCE DESCRIPTION:

**01170**

2153480

GATCCTTACA GTAGAGGTGA CCCCTGTAAT ACCATCTGCT GCCGTGAGGA CCTGAACTCA 60  
CCTAACCAA GTCCTGGAGG TTNNNNNGAC ACAAAGGTGG CAGATATCTA CCTAGCATCT 120  
CACTACACAT CCTATGCCAT AAGTGGTCCC ACAGTACAAG GTGGCCTCCC TGTTTTCGC 180  
TGGGACCGTT TCAACAAAAC TCTACATCAG GGCATGCCAG AGGTCTACAA CTTTGATT 240  
ATTACCATGA AACCAATTGAA GAAACTTGAT ATAAAATGNA GGAGGGAGAT GACGGACTAG 300  
AAGACTGTAA ATAAGATACC AAAGGCACTA TTTAGCTAT GTTTTCCCA TCAGAATTAT 360  
GCAATAAATT TNTTAATTGTCAAA 386

SEQ ID NO:3533

LENGTH:391

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04146

SEQUENCE DESCRIPTION:

GATCAGATTA AACCATGAA GTTGGAAAGTT CATNAGGCTA AGCCTGTNCC AGAAAATCAC 60  
CCACAGTGGG ATACAGCAAT AGAGGGGAT GAAGACCAGG AGGACAGTGA GGGCTTGAA 120  
GATAGCTTN AGGAAGAAGA GGAGGAAGAA GAAGATGATG ACTAAGCAGT ACTCTGAATG 180  
GNCCACAGTG TTTGACATA TTTNCAATT TTTNCTGTT TGGAAGTGTA TCATAAACCA 240  
GAAACAGTAC AGAACTGATG TTGNGGGNGG TGTNGTTTT TTACTCTAGA NATGGGTGCA 300  
TAATATNACT AGGCAGTGGC GGTGCCTTGG TNANCCTGN AAAATGTTAA GGCTTTNTG 360  
AAACCTTCC AGTNGGGGNT GGTCCNTNA N 391

SEQ ID NO:3534

LENGTH:157

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04147

SEQUENCE DESCRIPTION:

GATCCGCCCG ACTCGGCCTC CCAAAATGCT GGGATTACAG GCGTGAGCAT TCAAGTCTGG 60  
CGAGAGAGAT TGTTCTAGA TGAGGGTGGG GGCGGGTGTCTTAGCCCCAA AGCTTGTGCC 120  
AGTCTCTATC GGAAATAAAT GCCCCAAAA CCTCAAA 157

SEQ ID NO:3535

LENGTH:154

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04148

SEQUENCE DESCRIPTION:

GATCTACAGC AAAACACAGC GGGAGAGGTG CGCCTGGGCT CTCGCCATGG CAGGAGAAGA 60  
CTTTGAATTC TAACGACGAG CCCTGTTGAA ACTTCTTTTG TATGTGTGTG TGTTTTTC 120  
ACTATTAAAG CAGTACTGGG GAATTGTAA CAAA 154

SEQ ID NO:3536

LENGTH:151

TYPE:nucleic acid

01171

2153480

TOPOLOGY: linear

CLONE:HUMGS04149

SEQUENCE DESCRIPTION:

GATCTAGGCA ATGATTAGA GGAAACCTCN TCACAAAAAC CCCAGAGGAA GAATATGACC 60  
TGTGTTCAA ATTTGCCTT TCTGAACATAT TTAAAATTAT GTGTATGTTT TTGCTTGTA 120  
TTTAAAAGT AAAGCTGCTG TCCTCAAGAA A 151

SEQ ID NO:3537

LENGTH:355

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04150

SEQUENCE DESCRIPTION:

GATCTATGAA AGCGGGGAGA GGGAACCTGA ATATTAATTA TGAGCACAAA TTTGAAGGAA 60  
AGAAAACAAA GAACCATTAT CTAATCAAGC TTTGAAAGTC CTGCATGTTT GCCTTTATT 120  
TTAGTGTGTA CGCCAACATA GACTGTCTAA GGTATTTTTT TCCCCAAACA CTTGAATCTT 180  
GGTCGTTGGT ATGTAATCCA CTCTCTAGAG TCCAGTGTAC TTTAGACTTC ATCTGAGTCC 240  
AATATATGTA CCACACTACT GTTTTATTAA TGTAACAAACC TTGTAAATGA ATTTCAGATG 300  
GGTGATTAA GTGAGTCACA AGTCACAAAA CTTGCTATT CATAGTTAT CTNGN 355

SEQ ID NO:3538

LENGTH:148

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04151

SEQUENCE DESCRIPTION:

GATCTCTGCT TCCTGTACCT TGACATGCAA AAGGCTCTCC TAATACTCCA CATTCAAAC 60  
GAAGAGGAAA ATTGAAATCT CTAATGAAGC TGCTGTGTGTTT ATTATGANT ATTAATGAAT 120  
AAAAACTGCT TGGATGGTTT ACCTTAAA 148

SEQ ID NO:3539

LENGTH:148

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04152

SEQUENCE DESCRIPTION:

GATCAACAAAC TNGNTACTCT CGGGAAGACT CCTCTACTCA CAGCTGAAGA AAATGAGCAC 60  
ACCCCTTCACA CTGTTATTAC CTATCCTGAA GATGTGATAC ACTGAATGGA AATAANTAGA 120  
TGTAAATAAA ATTNAGTTCT CATTTAAA 148

SEQ ID NO:3540

LENGTH:147

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04153

01172

## SEQUENCE DESCRIPTION:

GATCAGAGTA AACAAAAGGA ATCTCAAAGG AAATTTGAAG AAGAAACTGT AAAATCCAAA 60  
 GTGACTGTTG ATACTGGAGT AATTCTGCC TCTGAAGAGA AAGCAGAGAC TCCCACAGCT 120  
 GCAGAAGATG ACAATGAAGG AGACAAA 147

SEQ ID NO:3541

LENGTH:146

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04154

## SEQUENCE DESCRIPTION:

GATCGTGGCG CATGGCTTGG GGATTAAACT ACCCTTGANG AGGACCCTTG TCCCAAACCC 60  
 TTCTTGTCT CTCCCTCCAAA AGTAGCTTCC TCCAACCCGC AGCCTCTCTG CACACTAATA 120  
 AACATGTGG CTTGAAAGG TTCAAA 146

SEQ ID NO:3542

LENGTH:144

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04155

## SEQUENCE DESCRIPTION:

GATCTTTAAG GACAAGTTA TCCAGCATCC AAAAAACTTT GGACTAATTG CATCATACTT 60  
 GGAGAGGAAG AGTGTCTCTG ATTGTTTTT GTATTACTAT TTAACCAAGA AAAATNAGAA 120  
 TTATAAAGCC CTCGTAGAA GGGN 144

SEQ ID NO:3543

LENGTH:140

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04156

## SEQUENCE DESCRIPTION:

GATCTGGTT TTNATATCTT TATCTTCATT CAGTGAAGCA AGCCAAAAGC NCACATTGT 60  
 ATGCNTTCTTCTTAA ATGGTATCTG TAAACATGTG TCCAATATAA AANCTATTTT 120  
 NAATAAAANG TTACATGAAA 140

SEQ ID NO:3544

LENGTH:138

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04157

## SEQUENCE DESCRIPTION:

GATCAGCAAT GAAGAACTGG NCGGACAAAA TTNAACGTTN ATGTAATGGN ATTCCAGATG 60  
 TAGGCATTCC CCCCAGGTCT TTTCATGTGC AGATTGCAGT TCTNATTCTT TTGAATAAAA 120  
 AGGAACCTGG AAANCAAA 138

2153480

SEQ ID NO:3545

LENGTH:137

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04158

SEQUENCE DESCRIPTION:

GATCTAAATG GGCCCAGGTG TTTACCCCTTA TNTNGTTTC TGCTAAATNA TGGAGGTTG 60  
GGGAGTTCT TCTCCACTTG TTTGTGGAGG CCTGGGGAGT TTTNNAGAC CCCCAGTAAA 120  
ACTNGTTAA TCCTAAA 137

SEQ ID NO:3546

LENGTH:136

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04159

SEQUENCE DESCRIPTION:

GATCCCTGTA GAGGTGGTAT TAAAGATGGT CACTGAGATT AAGAAGATT CTGGTATTTC 60  
TCGAATTATG TATGACTTAA CATCAAAGCC CCCAGGAAC ACTGAGTGGG AGTAATAAAC 120  
TTCTTGTCT ATTAAA 136

SEQ ID NO:3547

LENGTH:135

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04160

SEQUENCE DESCRIPTION:

GATCCTAAAA TNNTCTACTT TTGTNGCCTT ATCAGTNCTT TGCAATCTGC CTGTGGTTAT 60  
CAGCACTTAA AGCACAATTT TGAAGGGAA AAAAATGATA ATCACCTTAG TCCCAAAGAA 120  
ATAATTGTC ANNCG 135

SEQ ID NO:3548

LENGTH:134

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04161

SEQUENCE DESCRIPTION:

GATCTGGACT GGCTGGGAGT GGGGAGGGCG TGGAGACAGT CTACGGAAAG CGCTANAGGA 60  
CCCCCGAGAG GGTGCGAGTGG AGCCCTGAGC ATTGTAATAT GCGGCCCAAGC CTATAAACAG 120  
CCTCCGTGCT TAAA 134

SEQ ID NO:3549

LENGTH:134

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04162

01174

2153480

SEQUENCE DESCRIPTION:

GATCCTTGC TGTAAACTNG GAGAGACCAG TCCAAACAG AGGGGAATTG TAAGCCCTTC 60  
TCATCACCA ATTGGATGTT TTTGCTTATA GCAAATTCCCT GAAAATAAA TAAATAAATA 120  
TTTGCAAAAC TAAA 134

SEQ ID NO:3550

LENGTH:133

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04163

SEQUENCE DESCRIPTION:

GATCTATGGG AAGATACTTA TTTTCTGAG GTCCTTATGT CCTGTATAT AATTAAAGAC 60  
TCAAGAGAAT TTATGTGAAA TGCTTCTGT ATGCCAAAT CTTAGATTA AAATTATATA 120  
GCTGCTCCTG AAA 133

SEQ ID NO:3551

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04164

SEQUENCE DESCRIPTION:

GATCTCAGTT CCNTAAAAAA TGATAAAAAT TTTCATGTA TATTACATAT CTACCTACCA 60  
GAAATCCTT TTACAATTT ATATACAATC ATTTAAGAC CTTTTGAAA TAAATAATGC 120  
AAATGAACTA AA 132

SEQ ID NO:3552

LENGTH:154

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04165

SEQUENCE DESCRIPTION:

GATCACGGGG TGGNAGGNAA CGNGGCGTC CCTGCNTGGG GCCCATGGGT GANACACTCC 60  
AGTACTGAGA CCTAGAGTCC AGATGCTGT AGGAGCCAAG TCGTGTCTA AGTATTATT 120  
TAAACAAAAA GAATCACGTT TTCCCATTG TAAA 154

SEQ ID NO:3553

LENGTH:213

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04166

SEQUENCE DESCRIPTION:

GATCCTTAAT TGTAGCCTTT GAAGGATGCC CTGTGTAGAT TATTCACTGC CACAAATTGA 60  
AAGCTTCCAT GTTAATNTT ATCCCTTGC TATATAAATA AAGCAAATAT ATTTAGGCCA 120  
GGGTCTCACT GAGGGGGAGC TGTCTGTCA TCTTTAGAG TAAACTATTC TATAAACATA 180  
TGCAACAGC CCTAAATAAA TCTAAAGTCT AAA 213

01175

2153480

SEQ ID NO:3554

LENGTH:125

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04167

SEQUENCE DESCRIPTION:

GATCCCAAGG GCCCAGATAA CGCCCCAAC TTCTGGGGT TCACACGCGT CCTGAGACAT 60  
CTGGGAAGTG CCTCTGCCTG GNCCAAAGCT ATTCCATTAA AACTTTATTG CTGTNCTTAC 120  
TCAAA 125

SEQ ID NO:3555

LENGTH:127

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04169

SEQUENCE DESCRIPTION:

GATCTGTGTA CAATTTNGT CACTANGACT TTCCTCCAAG AACTAAGCCA ACTTGATGTN 60  
NCAAAGCACA GCTGTATATA ATGGTGTGATGT CATAATAAG TTGTTTATC TTTAAAGTAA 120  
AAGTAAA 127

SEQ ID NO:3556

LENGTH:126

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04170

SEQUENCE DESCRIPTION:

GATCAAGGAC TCTGGATAAT TGGCATAACA TCCTGGAATA GCTGAAACAG AGATATTATT 60  
CTCTGCTGTC CTCTGTTGTC TTTGTCTTT CACGTCTAA TAAAAGTGCT GGTGACAAGA 120  
GTGAAA 126

SEQ ID NO:3557

LENGTH:123

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04171

SEQUENCE DESCRIPTION:

GATCAGAGCC ATACCCCTCT TCACCAATGG GAAGTCAAGA CACCTATGGG TAAAAGTTCT 60  
CTCTGATGCA TGAAAACCTCA GAGTGATAAA GTAATTAA AATAAAATT TGGAGAAAGC 120  
AAA 123

SEQ ID NO:3558

LENGTH:121

TYPE:nucleic acid

TOPOLOGY:linear

01176

2153480

CLONE:HUMGS04172

SEQUENCE DESCRIPTION:

GATCTAAAAG TTTCACACA TAAATTCAT TAATTGAAA GATTATTTT AACTGCATA 60  
GGTCCACTTG CCTCTAAATA AAATNAACCT AAAATAAAA CAAACTATAC TTTGTGAGAA 120  
A 121

SEQ ID NO:3559

LENGTH:121

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04173

SEQUENCE DESCRIPTION:

GATCTCCCC AACCCACAA AATGCTTAA AGATAACTTA GCTCTTNTT CAGGGCTCAG 60  
TCCTTGAT GTAATCCGAC TAGGCCAGTN AACCTAAATA ATAAATATCC TCCTCAACAA 120  
A 121

SEQ ID NO:3560

LENGTH:120

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04174

SEQUENCE DESCRIPTION:

GATCCTGAGT TTTCTGGAC AATTCAGCT TTAATCAATA CATTGTTA AATGTGCCAT 60  
AAAATGAGAC TTTTACGCC TTTATAAGGC CTTAGATGTA AATAAACTCA CCCAACAAA 120

SEQ ID NO:3561

LENGTH:119

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04175

SEQUENCE DESCRIPTION:

GATCATTGTA TTCAGAGATT GTAAATGAAA AAATATAGAA ACTATTTAGT TTTGGTAGAT 60  
TTTTTTCTG ACAATGTGAC CAGACTGAAT TCCCTCATAA AGAAAAAATG CGGTGCAA 119

SEQ ID NO:3562

LENGTH:118

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04176

SEQUENCE DESCRIPTION:

GATCCCAGCA TTTCCATCG ACTTGTATT GTTCTGCTA CCTGACAATC ATCGCCTTGA 60  
GTACTGGAC AACCTTGAT TACTCATTAT ATCCTCAATA AATATTGTT GAACTAAA 118

SEQ ID NO:3563

LENGTH:118

01177

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04177

SEQUENCE DESCRIPTION:

GATCCTGGCT AGANTGNTAA TTAAAAGTAT TTAATTGAA GCACCATTTN ANTGTCGTA 60  
CTAGTAGAAA ATGATGTGAA TTTCNTTCT GTTCGGCTCC TATTTCCCTC ATCATTN 118

SEQ ID NO:3564

LENGTH:82

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04179

SEQUENCE DESCRIPTION:

GATCATAGTC GGGCATACTT ATCTATATCC NTAACCTCTA TATCTTTAAA TAAATGTGAG 60  
NACTGTTCTC ATGGAGANGA AA 82

SEQ ID NO:3565

LENGTH:214

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04180

SEQUENCE DESCRIPTION:

GATCTAAAGC NTTNTGTCA GATTATTTAA TATNATGACT TCATGCTTA TTATGCCTTA 60  
TNATGGCTGA CGTATTACTG TGGTGAAACA AAATATCTT AAAAGTTAAA ACATCCAGAT 120  
ATATAAGCAA TTTTNCCCTA AGGATAAAAGT ACCTTTAAGC ATGAGTGTAT CACAGCTTC 180  
ATTAGGNAAA CTTTCATTA CATACTGTT TAAN 214

SEQ ID NO:3566

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04181

SEQUENCE DESCRIPTION:

GATCCCCNAA TGTGTATGAA TGACTGAGGC TTTGTAAATT AAGGGACGTT TGTTTGAATA 60  
AAGTTATTG ATGGGGTCAA AGAAGCCATA TGTGATTGAA AA 102

SEQ ID NO:3567

LENGTH:101

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04182

SEQUENCE DESCRIPTION:

GATCCTCTCC TTAGTCTTAG CTCATGGGGC TCTTTATAAA GGAGTTGGGG GGTAGAGGCA 60  
GNAAAATNGG AACCGAGCTG AANGCAGAGG CTGAGTTAGG N 101

2153480

SEQ ID NO:3568

LENGTH:99

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04183

SEQUENCE DESCRIPTION:

GATCTGCAGT GCTTCACTGG AAATAATTAA TTCATTGCAG ATACTTTAA GGTGGCATT 60  
NATTCAATTG CTGTGCTTTA AATAAACAAA TGTACCAAA 99

SEQ ID NO:3569

LENGTH:97

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04184

SEQUENCE DESCRIPTION:

GATCACCCCTG GGCACATGTT GTCAGGACCT CCTGGGGTTG TGTATGGAT GCGTGTCTC 60  
AACCTTAGCA AAATAAACTT TCTAAATTAC TGAGAAA 97

SEQ ID NO:3570

LENGTH:95

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04186

SEQUENCE DESCRIPTION:

GATCTTCAGT GTGTCTGCAT AAGCTAACTT AAGATGAATT TAAGTACANN TTTCTGAAAT 60  
ATTTCTATTG AAATAAAATTAA CTTAAATTAA NNAAA 95

SEQ ID NO:3571

LENGTH:94

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04187

SEQUENCE DESCRIPTION:

GATCTTTGTG AATTCTATGA ATGTATTAAG TTATCATATG TACTCCCCAA AATAGGTACA 60  
TCTATTATGT ATCAATAAAA AANTTTAAAA CAAA 94

SEQ ID NO:3572

LENGTH:93

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04188

SEQUENCE DESCRIPTION:

GATCCCTTGA GCCGAGGAGG TTGAGGCTGC AGTGAGCTAT GGTCACACCA CTGCACTCCA 60  
GCNTTGGTTA TNATGCAAGA CCCTGTTAC AAA 93

01179

SEQ ID NO:3573

LENGTH:89

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04189

SEQUENCE DESCRIPTION:

GATCGCACAC CTTGCAACA GATGTGTTCT GATTCTCTGA ACCTACAAAA TAGTTATACA 60  
TAGTGGATA AAGAAGGTAA ACCATCAA 89

SEQ ID NO:3574

LENGTH:90

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04190

SEQUENCE DESCRIPTION:

GATCAGTGTC TCTAGTCCTA CCCAGTTTA AAGTCATGG TAAGATTGA CCTCATCTCC 60  
CTCAAATAAA TNTATTGGTG ATTTTNGAAA 90

SEQ ID NO:3575

LENGTH:87

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04191

SEQUENCE DESCRIPTION:

GATCCGCCAG GTGCGGGCGC TACTGCAGGC ACAGCAGGCC TAGGTCTCC CACACCTGCC 60  
CCCTAATAAA GTGGCGCGA GAGGAAA 87

SEQ ID NO:3576

LENGTH:87

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04192

SEQUENCE DESCRIPTION:

GATCCACCCA CACCTAACGTC ACAGAATTTC TAAGTTCCCC AACTACTCTC ACACCCNTTT 60  
AAAGATAAAAG TATGTTGTAA CCAGAAA 87

SEQ ID NO:3577

LENGTH:83

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04193

SEQUENCE DESCRIPTION:

GATCAAACGT AATGAAACCC CCACACACAC ACACATGCAT ACACACACAC ACACAGCCAC 60  
ACACACAGAA AATATACTGT AAA 83

2153480

SEQ ID NO:3578

LENGTH:83

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04194

SEQUENCE DESCRIPTION:

GATCCCTATT CTGCGTGTAT GTGTTGCAC ATGAGTGTTC TAGACCATA GACCATTAAA 60  
AAATACGGAA TTCAAAAGTT AAA 83

SEQ ID NO:3579

LENGTH:84

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04195

SEQUENCE DESCRIPTION:

GATCTATGAA TGTTTTNTT AAAATTACA AAGCTTGTA ATTAGATT TTTAATAA 60  
AATGCCATT GTGCAAGNTT TAAA 84

SEQ ID NO:3580

LENGTH:112

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04196

SEQUENCE DESCRIPTION:

GATCACATAA AGGCAAGAGG ATACTTCATG AATAATACAT TTNAATGCAA ATAAACAGAT 60  
GGTTCACTTC TACTAGCTAT NNCCCTGTCT TNNTATACAC TGAGTAGATT AN 112

SEQ ID NO:3581

LENGTH:74

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04197

SEQUENCE DESCRIPTION:

GATCTATGTC TGTTGGTGGC AATGTGAGGG TGATACTCTC TCACTCTAAT AAACTTGGCA 60  
CTTCTCCGAG TAAA 74

SEQ ID NO:3582

LENGTH:74

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04198

SEQUENCE DESCRIPTION:

GATCCTGTAT GTGTGTTGAG ATTTAGAGGT TTCATTTATN TTGTCTGCTA ANAAATTGTT 60  
ACTCTAATAA TAAA 74

01181

2153480

SEQ ID NO:3583

LENGTH:71

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04199

SEQUENCE DESCRIPTION:

GATCACTGTA TAGACTGTTA AATTGATTT CTTATTACCN ATTGTTAAAT AAACGTGTG 60  
AGACAGACAA A 71

SEQ ID NO:3584

LENGTH:71

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04200

SEQUENCE DESCRIPTION:

GATCTATTTC TCTGTCTACT TTGGANATGA TTGCATAATA AATAAAATTT TACTGTTTT 60  
TTAAAAGGAA A 71

SEQ ID NO:3585

LENGTH:69

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04201

SEQUENCE DESCRIPTION:

GATCTAAAGA TGTTTAGGGA AGAGCTCGAC TAAAGAACAA TGAAATAAAAT GGTCCAAGGG 60  
GAAGTCAAA 69

SEQ ID NO:3586

LENGTH:65

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04202

SEQUENCE DESCRIPTION:

GATAAAAAT GTAAGTCTAT TGGTAGAGAT TAAGTAAAGT ATTTATTGCT ACATCATAGT 60  
TGAAA 65

SEQ ID NO:3587

LENGTH:53

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04203

SEQUENCE DESCRIPTION:

GATCTGTGTT GCATTCAAA ATAAACTGGT GTGTGCTCTG CCTGGATTG AAA 53

SEQ ID NO:3588

01182

2153480

LENGTH:153

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04204

SEQUENCE DESCRIPTION:

GATCTAGCC CAGGACGNCA AGCAAGCAGG TCTTGTCAAG AAGATTTGTC CTGTTGAGAC 60  
ACTGGTGAA GAAGCCATCC AGTGTGCAGA AAAANTGCC AGCAATTCT AAAAATTGT 120  
AGTAGNCAT GGNCNAAGNA TCAGTGGATN CAN 153

SEQ ID NO:3589

LENGTH:29

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04205

SEQUENCE DESCRIPTION:

GATCCAATA AAGGTAGCTG CTGACCAAA 29

SEQ ID NO:3590

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04206

SEQUENCE DESCRIPTION:

GATCTCTCA CAAGAGCCCC TGCCCCCTTG TTGGAGGCAC AGTTTTAGAA TAAGGAGGAG 60  
GAGN 64

SEQ ID NO:3591

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04207

SEQUENCE DESCRIPTION:

GATCCTTGC GTGACAGTCT TGTATGGAAA ACAGATGCTG ACAGAATTGT AGACTACCAT 60  
NCCN 64

SEQ ID NO:3592

LENGTH:63

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04210

SEQUENCE DESCRIPTION:

GATCTCGCCT TGTTCCTTAC AAGCAAACCA GGGTCCCTTC TTGGCACGTA ACATGTACGT 60  
ATN 63

SEQ ID NO:3593

01183

2153480

LENGTH:63

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04211

SEQUENCE DESCRIPTION:

GATCTTGC G AATTACAATG CATATATGTC TATTTATTCA ATATCTGTCA TATAATANCT 60  
ATN 63

SEQ ID NO:3594

LENGTH:58

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04213

SEQUENCE DESCRIPTION:

GATCTTAAGA AAACTTCATA CTGTATGAAT AAGAAAATAA AATATTTAAA ACTTGAAA 58

SEQ ID NO:3595

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04214

SEQUENCE DESCRIPTION:

GATCGCCAAG TTCAAAGCTG TGACACATGTG GACACTCAAT AAATGTTCAT TGGTGAAAAAA 60  
CAAA 64

SEQ ID NO:3596

LENGTH:56

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04215

SEQUENCE DESCRIPTION:

GATCCAAAAA GAGTCGACCN GCATTNTTA TATTAATAAAT AAAGTCAAGA TTTAAA 56

SEQ ID NO:3597

LENGTH:52

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04216

SEQUENCE DESCRIPTION:

GATCTTTGTT AATGTCTTGA TTCTGTTCGC AAAGCACAGA CTAGTGCTTA AA 52

SEQ ID NO:3598

LENGTH:52

TYPE:nucleic acid

TOPOLOGY:linear

01184

CLONE:HUMGS04218

SEQUENCE DESCRIPTION:

GATCGCACCA CTGAGCTCCA GCCTGGGCAG CTGNATGAGA CTNCATCTCA AA

52

SEQ ID NO:3599

LENGTH:51

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04219

SEQUENCE DESCRIPTION:

GATCTGGAGG GACACACAGG AGACACCTGG CATAACCAAA AAATGATTAA A

51

SEQ ID NO:3600

LENGTH:51

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04220

SEQUENCE DESCRIPTION:

GATCGAAAAC ATATAGANAA AATAAAATGT GTGGTTGCAC CTGTACTGAA A

51

SEQ ID NO:3601

LENGTH:466

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04247

SEQUENCE DESCRIPTION:

GATCTAGAGG AGGATTGCA GGAAGAGCTC GTGGAAGAGG TGGTGACCAN CAGAGTGGTT 60

ATGGGAAGNT ATCCAGGCGA GGTGGTCATC AAAATAGCTA CAAACCATAAC TAAATNATT 120

CATTTGCAAC TTATCCCCAA CAGGGTGGTA AGCAGTATT TCCAATTGAG ATTTCATTT 180

GANGGTGGCT CCTGCCACTG CTTAATAGCA GTTCAAACATA AATTTTTGT ATCAAGTCCC 240

TGAATGGAAG TATGACGTTG GGTCCCTCTG ANGTTTAATT CTGAGTTCTC ATTAAAAGAA 300

ATTTGCTTC ATTGTTTTAT TTCTTAATTG CTATGCTTCA GANTCATTTG TGTTTTATGC 360

CCTTTCCCCC AGTATTGTAG AGCANGTCTT GTGTTAAAGC CCAGTGTGAC AGTGTATGA 420

TGTAGTAGTG NCTACTGGTT NTTAATAAA NCCNTNTTGT ATGAAA 466

SEQ ID NO:3602

LENGTH:429

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04248

SEQUENCE DESCRIPTION:

GATCTATAAA TCAAGAAAAT CCATTGTCAT AACCATTTTT AAAAGTCAT AATTAAGACA 60

TCCTTAATTA AAAAGTTCA AATCTAGACA CTAATGTGT GTGAATGTAC AAAGAAAACA 120

AACCATGCT TATGCTGTTA TATACTAGAG AAATTTGTG TTGCTTGCTG TTTTAACTG 180

ACAGATGAAG GACTTAGTT GAACTTCATA TTGTAAGAAC TGTTAATAAA AGTTGTCAAG 240

2153480

TAAAAAGCGC TATATCTAAA AAGACTTTAT GAACAGTTAT TCTATCAACT TTTAAAGGGT 300  
TTTAAACCTG CCCAGAAATT ACCTGGTAT CTGAAGTTTC CCTCTGTCTC CTCCCTCAA 360  
TTNAGGCTTG TTATTTGTCA TGCAACCAGCA TTTGGGGGNT AATAANAATT TCTTNGGTT 420  
TNGTGGAAA 429

SEQ ID NO:3603

LENGTH:419

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04249

SEQUENCE DESCRIPTION:

GATCTGTTGT TTGTTTTAA GGTGGTGTTC TGTTAACTTC CAGCAGGATG CAGAACATCAA 60  
CTGGTAAACC TATAAATTGG TCAAATTNA CCCATGTTGT TTCTTGAAA ACAATGTATA 120  
TNCTCTAATA TTTGGATATA GGGTATATGA NCATTAATGC AACTTAATTG TATTCAGAAG 180  
TACAGTACAT ATGTNCAGAT TTCTTTCT AACCTTATTG AGTGATAGAG GTGTGGTAAA 240  
CNCTTCCATT ATGTTTATGT ATTANCACTG TAATTTGTC ATTTTNATAT ATTTNGATGT 300  
TATGTAACTA GATGCATACA GGATTAGGTA TTCCTTCTG TATCCTTT TATGTGGAGA 360  
TGATATTTT ACATAGCAAA GTATTGTAAT GCATTAATAA TAAATGGTCA ACCATTAAGA 419

SEQ ID NO:3604

LENGTH:419

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04250

SEQUENCE DESCRIPTION:

GATCTGCTAG TTCCAGGCCT CTAAGACAGG AACGTATGTG CCATAAGTGN GTCTACTTCA 60  
CAGACTCAAT GAGGCAGAAA TTATTGAGT TTTCTCCTAT TTCTTCTGCA CCCAACCTTC 120  
TNCTTGATT TCAAAGGCCA GGCCATGTAC ACTAACGTCC TTGAAATTG CAGTTCTGTA 180  
TGCTTCTATT CCAAATCATT CATTACCAAT AAAAACGGAA TACCACCCCTT TCCATTAT 240  
AGNCCTCATC CCCTATTCT GTCAAGACAGT TATATGACAG GGTGGNCNGN GGGCCTCTTA 300  
GTTCATCCAA AGTCTNNCT GNAGTGCTAG NCTTCAGAC TCTTATCACT GGAAATCNTT 360  
AAGGGTTGAG GGGGNTTAN TTTCCCAGNA CTGTGNAGG GNTTCAACTG TCAAAACTN 419

SEQ ID NO:3605

LENGTH:404

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04252

SEQUENCE DESCRIPTION:

GATCCGACAC AGAGAACAGG AGGNACTAGA GGGCACANAN AGNAGGGCTT TAAGCCAAAC 60  
TACATGGAAA ATGGTATAA AAGAAAATNT GGCTGAAGTT ACCCGAAGTT CAGCTTGAG 120  
TGTAATTCAAG AAGAGTTAAG ACCAGAAGTA CTGGAATCAT ACTTCCTTTC AGTCTTGCCA 180  
CTTGCTTAGT GAGGCTTTGCGAACCTGGA AGGAGACGTC TAGAAATCCC AACTTGCTG 240  
TGTAAAGGACCTT ATTAGCTGCA AGTCAGTGGAA AGTCTATAGA AAANAGTGTG AATTCCATAG 300  
TGGCTTGAC TTCTTAGCAA GGATTGGGA TAAGTCTAAA ACTTCAGACT TAAAGCTTG 360

01186

2153480

AAGCATGTTA ACTGCATGAN ATATTAANCA TTTCGAACTT CAAA

404

SEQ ID NO:3606

LENGTH:403

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04253

SEQUENCE DESCRIPTION:

GATCCATGAA TAAACAGAGG CATATATTAA AAATGAAATT TAATGAGCAC TTAGTGACTT 60  
CATTTGTTCA AGAATATTTG ATTCCTATT GTGTGCATGG GAGGTTTACA AAAGACAGAC 120  
TGTCCCTATG CTTGTCAGC TTACAATCTA TTTAACTATT AGAGGCCCTG TGAGATGTAG 180  
GCAGTTATT ACAGATGAGA AAACTAACAC AGCAGTGGCA ATGCTGGAA TGGCCAACAG 240  
GCTTGGAAATT CAACTCAGTT TAGCACCAAA GCCAGTNCTA TTAAGACCTG AAGTCAACA 300  
GTGGATTCT TACCCAAAATA GTTTTAAAG TATGCTCTAA GGNCCAATGT TTTAATGAA 360  
ATCTTGGNTT NCAAGTNGG NNTAAAAGGG TTCTGAGCAT AAA 403

SEQ ID NO:3607

LENGTH:396

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04256

SEQUENCE DESCRIPTION:

GATCTTACTT CGTTGACCCA TATTTTCCC CTGACCAAGT TACCTGTAAA CTGGAATTG 60  
CAAGGGGATG CTGTGATGAT AACCCCTTTC TATTGCTGTA ATGTTCATAT AACCTGGAA 120  
ACTGAGAGAA GGGGATGTGT AAATAAAAGC TAAACATT TAGTAATGTG TTAAAATGTC 180  
ACTCTCTCTT ACCCTGTTTC CCTTTTTGC CAGATGATGA TTTTTTATT TTTTTTGT 240  
ACTTTACTGG ATGACTGTGA AGCGNTGAGT ATTGGGTTGG GGTAGGTGTG TTGATTGAA 300  
GAGTGCATGT TAAGACCTGA AGGGAACTA CTTGAGGATG ACTTAAGAAG CATCCCATGC 360  
AAATATCTG TTTTGCCNG AATAAAATAT TTCAA 396

SEQ ID NO:3608

LENGTH:392

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04257

SEQUENCE DESCRIPTION:

GATCTGCCCG CCTTGGCCTC CCAAAGTGCT GGGATTACAG ACATGAGCCA CCACCGTTGG 60  
CCGGGATAGT ATATTTTAT AGCACTCCC CTACTGATTG CTGCCTTC TC TGCGCTACA 120  
AGGGACCCAC AGAATTACAG GGAAGTTACA GGGNNNGCAGG TTTCATCTCA ATATTGGGAG 180  
AGATTTCAAA CAATCACACC NNNNNNNCGA AGGAGTGGGC TGTCACTAGG AATTTTATT 240  
CCCAGTCCGT CAGGAATTTT GTAGAAGGGC TTCATGTGCT GGTACCAATA GGACAGGAAG 300  
ATTTTAATCA GCTTTACTAT CTATGTTTT TTATGGAAAC TGTGTATG TATACATACA 360  
TTTCCAAAAA AGNANAATT AAATGATTAT AG 392

SEQ ID NO:3609

01187

2153480

LENGTH:392

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04258

SEQUENCE DESCRIPTION:

GATCCGCCCA CCTCCGCCTC CCAAATTGCN GGGATTACAG NCCTNAGCCA TNCCCACCCG 60  
GCCAATAAAA ATTTTTTAA AGCTAAAATT GACTCTCATG CAAATAAGAT AAAATGAACA 120  
TATGTTAAAT ATTTTAACCT AATGAGAGAA ATAGTAAGAT GTTACCAAGTT ACTTGATGAT 180  
GGAGGAAAGG ACGAAAAGCC AAGGAATACA TGGAAATGCAG CTCTAGGTGC TGAAAAAGGC 240  
ANGGAAAGGT TCTACGTTAG NGCTTCCAGA GGGAGCTAG CCCTGTCANC ANCNTNGTTT 300  
CAGCTCAGTC ATATCGNTGT TTAGACTTTC TGGTCCCCAG NGCTGGGGGG GGGATATATT 360  
TCCTGCTGTT TTAAGNCNCC NNATTTGTG GN 392

SEQ ID NO:3610

LENGTH:391

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04259

SEQUENCE DESCRIPTION:

GATCCTAAGG GGTCAGGGG GACCCTACCC CCACCTCAGG TTGGGCTTCC NTGGCCACTC 60  
ATGCTCCACA CCAAAGCAGG ACACGCCATT TTCCACTGAC CACCCCTCTAC CCTGAGGAAA 120  
GGGAGACTTT CCTCCGATGT TTATTTAGCT GTTGCAAACA TCTTCACCCCT AATAGTCCCT 180  
CCTCCAATT CAGCCACTTG TNAGGCTCTC CTCTTGACCA CTGTGTTATG GGATAAGGGG 240  
AGGGGGTGGG CATATTCTGG AGAGGAGCAG AGGTCCAAGG ACCCAGGAAT TTGGCATGGA 300  
ACAGGTGGTA GGAGAGCCCC AGGGAGACGC CCAGGAGCTG GCTGAANGCA CTTTTGTACA 360  
TGTAATGTAT TATATGGGT CTGGGGCTCC N 391

SEQ ID NO:3611

LENGTH:386

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04261

SEQUENCE DESCRIPTION:

GATCCGACCG CGTGNTGCCG CTCTGCTCTC TCATACGGT GTATGTTGG TTCCATGTCA 60  
CAGCCCCCTA GGAGCCAGTN ATGCTCGGCC TTGCGCCCGT NCCACCTCCC AGGCCACCCCT 120  
TCCTGGGCTT CTGGGCCACC TGCCCTCGGG GGGCCCTGC NAGGGTGCT GGNGTTCCCA 180  
CGTGTCCCCG GGCTTTCCA GGAAGCCGA GCCCAGGACC TGTTGGCAGA GTTGCCAGGG 240  
TTACATTTT NAAGCACCTG CTCCCTTTNT TGCAGTGTAT TTTCTACAAAC CAGATTGTAT 300  
TAATATTTT AACTTGCCTC TTTAAAAAA TATACTTAAT ACAATATATT TAATTNTGAA 360  
TTAAACTCTT AAACTTTCTC TCCAAA 386

SEQ ID NO:3612

LENGTH:375

TYPE:nucleic acid

TOPOLOGY:linear

01188

2153480

CLONE:HUMGS04264

SEQUENCE DESCRIPTION:

GATCCCTTG GGGCATGAAG TGTGACAAGT GTGGGCTCCT GAAAGGANTG TNCCAGAGAA 60  
ACCAGCTAAA TCATGACACC TTCAATTGC CATCATGACG CAGACCTGTA TACATTAGGN 120  
TAAATCTGAA TTTCACTGC TTGGAGAGT CCCACCCACT AAGCACTGNG CATNAAACA 180  
GGTTCTTGTG CTCAGATGAA GGAAGTAGGG GGTGGGGCTT TCCTTGTGTG ATGCCTCCTT 240  
AGGCACACAG GCAATGTCTC AAGTACTTTG ACCTTACGGGT AGAAGGCAA GCTGCCAGTA 300  
AATGTCTCAG CATTGCTGCT AATTGGTC CTGCTAGTTT CTGGATTGTA CAAATAATG 360  
TGTTGTAGAT GGAAA 375

SEQ ID NO:3613

LENGTH:372

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04265

SEQUENCE DESCRIPTION:

GATCCTAGAC CAGCATGCCA GTGTGCCAAG GCCACAGGGA AAGCGAGTGG TTGGTAAAAAA 60  
TCCGTGAGGT CGGCAATATG TTGTTTTCT GGAACCTACT TATGGTAACC TNTTATTAT 120  
TTNCTAATAT AATGGGGGAG TTTCGTACTG AGGTGTAAAG GGATTTATAT GGGGACGTAG 180  
NCCGCNNTCC CNNGTGTGT AGGTTCTCT TTTTCAGGCT TATACTCATG AATCTGTCT 240  
GAAGCTTTG AGGGCAGACT GCCAAGTCCT GGAGAAATAG TAGATGGCAA GTTTGTGGGT 300  
TTTTTTTTT NACACGAATT TGNGAAAAC CATTAANTCA TTCAAAATAA TAANCTNTT 360  
TTATTNGGA AA 372

SEQ ID NO:3614

LENGTH:372

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04266

SEQUENCE DESCRIPTION:

GATCTAAATA TATATTGT ATATTATAAT ATTTAGGAA TAGCTTAATT AAGANCTCAC 60  
AGACTTTGAC AAAGTGGTAA CTAGACTTTT AATTACTAGA TTCTTCAAAT TAGGCTTAAT 120  
GCCTGCTAGC ATGCCAATCC AATCCCCTGA CTGATGGTAT TATACACTAT GGCAAATACA 180  
AAGTTGTAGT ATTATGGTTC TTGATGGTGT GATTTACTTA TGTAATTAT GTACAATT 240  
AAGTTCAATG AAACACTGAT TTAATGTACT GAAAGGTAAA TAGTACCATATA GTGAATTATT 300  
TCCTGTCTG CCTTAGGTTT ATTTTATNA TCTTCAATAT TAGANTAAAT GCTAAATTAT 360  
TTTCATTTA AA 372

SEQ ID NO:3615

LENGTH:370

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04267

SEQUENCE DESCRIPTION:

GATCTGAACCT CCTTATACAT AAGAAGGTGT GTATATTAAT CCAATTATGG ACTTAAATAA 60

01189

2153480

TTTAAAGT ATAAATACCC TTATTTGCTG CAAAGACCAG TGTGTAGGCA TTTGCTTTT 120  
AGCAATATT TTAAGTGCTC CATTAAATG CCGAGGAATA AGTCTTTGG CAACACAAAC 180  
TGGTCAATAA TAGGTAATGC AGGTATGTT AGGTTAACCC AACAAATGTT TGCACTTTA 240  
TGCTTATTT CTGTCAACAC TAATGAAGTC AACATTGCCT GAATGCTGA ATAATGAAAC 300  
ACATCCNGT TTAAAGTAT GTAACTGAAA AAGAAATAAA AAANAAATTA AAAGGTAGGT 360  
TTTTTTAAA 370

SEQ ID NO:3616

LENGTH:370

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04268

SEQUENCE DESCRIPTION:

GATCCCATT AATAGTATGT ATAGCTGAAA TCTGTAATT AATCACTTT TCTCTTTAT 60  
CCTCTAACCA AAAAATTGTT TAATTTGCA TCCCCAAATGT TTTAAATCTT TGTATATTTT 120  
TNAAAAATCC NTTTCTCCCT AGCANTGCCT TTTNGTGGT TGAAATAGA CTTACTTGCA 180  
CTTTGAAGAT GAGTTACTCC TTGTCATCTT ACAAAATATGT GATATGGTAA TTTNCATAAC 240  
AGATGTCAGT TTTGANCAA GAATTGGTGA TTTGTTATA AGAAAAAAAC TGGCTTCATT 300  
NCTGTGNAAT TGCTCTTGG NAAATTNCTN NTTNACACGT GTAAGCCAAC CTGAGGTACC 360  
GTGATGGGTN 370

SEQ ID NO:3617

LENGTH:368

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04269

SEQUENCE DESCRIPTION:

GATCCCTGCT CAAGCAGCAC AGAGGAAGGG GCAAGACGTG GCCTGTAGGC ACTGTNTCAG 60  
CCTGCAGAGA AGAAAGTNAG GCCGGGAGCN TGAGCCTGGG CTGGAGCNNT CTCCCCCTCCC 120  
CANTTGGACT AGGGGCAGTN TTAATTTNA AAAGGTGTGG GTCCCTGTTT CCTCTTCCAG 180  
GGGTCCAAGG GAACAGGAGA GGTCACTGGG CCTGTTTTT CCCTCCTGAC CCTGCATCTC 240  
CCACCCCCGTG TATCATAGGG AACTTTCACC TTAAATCTT TCTAAGAAA GTGTGAATAG 300  
GATTTNACT CCCTTGTAC NNCNGNCTGA GGAAACGCAA ATAANAAGGG CAACATGTTT 360  
CTNTTAAA 368

SEQ ID NO:3618

LENGTH:364

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04270

SEQUENCE DESCRIPTION:

GATCGGCCCA GCTCCTGAAC TNTGANGAGG CCATTCAATAT GGCATTCTG GAACAAAACA 60  
CTGCACAGGT ACCAGCCTCT CCACCTCTGA CGGGGTTGGT GCTGAACAGT CAGGGATTGT 120  
NCTTGAACTA GACTCTGAT GCTTCTTGCA ATCTTCTTTC ATCTTCCCT GAAATACACA 180  
AAATAAACAA NTACAATAAC AAATAGTAAT TAANTGACTT TCAGGATAAC ATCTAGTTGT 240

01190

2153480

TCAGACTTCA CCCTTCACAG GTGTGTGTGT ATGTGTGTTT ATGTCTGTAT ATTGANGCAN 300  
TTTGAATTAA TTTTACTGTA TATNTNCTGA GTAAANGACT GANATGNCT NCTTGGGTCA 360  
GAAA 364

SEQ ID NO:3619

LENGTH:363

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04271

SEQUENCE DESCRIPTION:

GATCTGAAGC CTTCCATAAA TNAGAGGCCA TTCATATGGC ATTCTGGAA CAAAACACTG 60  
CACAGGTACC AGCCTCTCCA CTCCCTGACCG GGTTGGTGCT GAACAGTCAG GGATTGTTCT 120  
TGAACTAGAC TTCTGATGCT TCTTGCAATC TTCTTTCATC TTTCCCTGAA ATACACAAAA 180  
TAAACAAATA CAATAACAAA TAGTAATTAA ATGACTTTCA GGATAACATC TAGTTGTTCA 240  
GACTTCACCC TTCACAGGTG TGTGTGTATG TGTGTTATG TCTGTATATT GANGCAATTT 300  
GANNTTATTT ACTGGTATAT GTTTCTGAGT AAAAGNCTGA AATGNNTNC TTGGNNCNNGG 360  
AAA 363

SEQ ID NO:3620

LENGTH:361

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04272

SEQUENCE DESCRIPTION:

GATCCAGGAT GTACTGGAT GAGGGAGGCCT GGCTTATCTA GGAAGTCGTG TCTGGGGTC 60  
TTATTGCTGC TCCATACAGC TGTACGTCA CGCCCTGGCC TTCTCTGTAG GTTCTTGGCA 120  
GCAANNNNGC AGCTTCACT CAGTGACACA AGTAATTACT GAGTCCTAAT TTGATAGCCA 180  
CCAAGTGTAC CTGGGTAGGC AAAGTCAGAT TTTNGAGGAC CTTTTCTG ATTTGAAGTT 240  
TTAATTACCT TATTTCTNT TATGCTTNC CTCTGTCTG TAATCNTNC CTTCCCTAAA 300  
ANCCTCCCTA TAAATTCAAT TAATTTGGGT TAATTTAGG ATAACCCCAT TTANTTCNA 360  
A 361

SEQ ID NO:3621

LENGTH:359

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04273

SEQUENCE DESCRIPTION:

GATCCAGATN CTTTGGATG TCAGGGATAT TCACATTGAC ATGTCTNNNN AGTGTCCAG 60  
GAGATTTAG TTTGAATAGT ACAATTTTT CTTCTTACAA CAAAACCTAG AACGGCTTCT 120  
AACTTATTTC TTCATGGCCA AGAAACTACC CTAACCTATC TCGATAAATA TTTAGTTCTG 180  
TCTTATTCT AATGTGTAAA ACAGGTTTA AAAATAATAT ATAGATTTCG CATTATAAAA 240  
AAAAGATTAA ATTTATAGAA CCAAACNTGA ACATATGTTT AATTTAGCCT AATCAGAAGG 300  
TTACAGAAAA AGTTGCTGTA AAGATAGAAT AAAGGGTATT GTACTGGTCT GTTTTAAA 359

01191

2153480

SEQ ID NO:3622

LENGTH:356

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04274

SEQUENCE DESCRIPTION:

GATCTACAGC AGCTGCATCG AGGACTCCCC CAGAGGTGCT ATAGGGCTGC GCATTGCACT 60  
GGCCATCTCA GCTATAGCCG TCTTCCTGGT CTTGGTGTCT GNCTGTATCC TTGATTGG 120  
CACCAAGGTCT CTCTGCACT CCATCATCTC CTTGAACACT ACAATNAGCT GTNCTGAAGC 180  
CCAGAAAATT CCATGGACAC CCCCTGGAAC TGCTCTGCAG TTTTACTCCA ACCTACACAA 240  
TGNTGAAACC TNTTCTTGGG TGAATTGGT ATTGTGGTGT GTGGTCTTGG TGCTCCAGGT 300  
CGTGCAGTGG AAGTCTGAAG CCACCCATA CGGGCCTCTG GAGAGGGGTG ACCCTN 356

SEQ ID NO:3623

LENGTH:420

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04275

SEQUENCE DESCRIPTION:

GATCCCCCT GNCAGACACC AAAGCTGTGA ACAGAAAGAC TGCTGGCCA GCAAACCTTG 60  
GGACATCAGC CTNGCCAGC CTGAAAGCAT CCGNAGTGAC CTAGAGAGTT CTGATGCACA 120  
GTCAGACGAT GTGCCAGACA TCACCTCANA TGAGTGTGGC TCCCCCGCT CCCATACTGC 180  
AGCCTGCCCC TCGACCCCCA GAGCCCAAGG TGCACCGAGC CCAAGTCCCC ATATGAACCT 240  
CTCTGCCCTA GCCGAGGGAC AAACGTCTT GAAGCCAGAA GGTGGAGAAG CCAGAGTATG 300  
AAGTGGAATG AATGCTCCTG TTCTGAGANG ACACTTGTAA CTGCATCTT TGGAATTTTT 360  
TTTTTTTTT GCCCAGGGGN NAGGGTTNT GGTTTTAAT TTANAGGN CN TTTGGCAAN 420

SEQ ID NO:3624

LENGTH:352

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04276

SEQUENCE DESCRIPTION:

GATCAGAAATT AAACTAGTAC TATGAAATGT CCTTTGAAT GTNAGGTCAA GAAATCCATG 60  
TACAGAGTCG TGCACTTCAT TGGCTGTAAC TGTCAAACCTT GCCTTGATT AGAAGTTAAA 120  
TCCCACATCGTA AATACATCAC GAGGCCAGCT GTGTGATTTC TGAGACCTAG ATGAGAGTCC 180  
NATTACTTCA AGCNTTGATT CAGTAATNT TAAGCAGCAG AAGNCTTCGG ATGGGTTGAA 240  
AATCAATNTT ACAAGGTTT AACTCATAAA CCCATNNNGGG NTTTTTTTT TCCTCTGCAA 300  
NNGGTTNCTA AGGCTANTCC NTGGAACAC TNTGGAAAN AAATNTGGAG GN 352

SEQ ID NO:3625

LENGTH:348

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04278

01192

## SEQUENCE DESCRIPTION:

GATCTCCAGT NGGCCTTG C AGGCCGGCC TCCTGCCTCT NGAAGGCCTA NCACGGGCC 60  
 GGCCTCGGCC TCGGCCTCAC AGCAGACTCT CCACGCCAG CTAGCTCTG CCTCACTGCG 120  
 GCCTCCCCAG TCCAAAGCTC CTGCCTTNG GCCACTTCGG CAGGTCCAGC TCCTGCCTGC 180  
 CAGTGGCTC TTTAGGCCA GCTCATTCTCAC GCGTCGGCC ATTCCAGGCC CCGTTTTCC 240  
 CTTCCGGCAG CCTCTGGCC TCTAATTGT TTATNTTTG TGTATAAAATC CCAAAATATT 300  
 GAATTTGGA ATATTCCAC CGGGGGNGTA AATATTTGA TAGTAAA 348

SEQ ID NO:3626

LENGTH:347

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04279

## SEQUENCE DESCRIPTION:

GATCTTATT AAGACAGTGG AAAGTATACT ATTAAGTCAT CATACTCTT TGGAGACTTG 60  
 TCAAANACAG CAATNAGAAA ATAAGACCTA GCATACCGTG GAGAACCATT AAAAATTNA 120  
 NANGAAACAA CAAGTATTAT GTCAACTTAC TTCAAAGGCG AGTTTGGGA TTTNATGCAG 180  
 TAAAGATTC CTGTTTATG ATTGTCCTT GAAAGTCAA TGCGGCCTG TCCATTGTCC 240  
 TCTATTAANC TTNCAGAACT GTCACCAACA AATTGAGTT GCCTGTCTA GGGTTCTGGG 300  
 TAGTGAAGAT ATTNNATNAT ATAATNAAAT ACAGTGTAG TACTTAN 347

SEQ ID NO:3627

LENGTH:341

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04280

## SEQUENCE DESCRIPTION:

GATCAGAGGA GGAGTGTGAG TGTCTCATA CTCACAGCAA AAGGAGGGAA TTCAGGAGAG 60  
 GATTGAAGAA GCGGTTCTG TTTTAAGGC ATTTGCAATC ATTGCTGGAG AGACAGAAC 120  
 AACAGATGGG GAACAATGGC CAGGGACTCC AGGCCTGATT TAAGCCAATG CCGCCCTGTG 180  
 GTCTTACCC ACGAATGGTG TGGAAAATNA GAGCAGGGAA GAGGATTAC TCACTGGCTG 240  
 TGGAGTTAGG TCAGAAGGGG GNTGGAAAGA TCGAACCGTA TGGNTTGGG GACATTCTT 300  
 AATCTNTAGG CTTCACCTTC CTTAACTGAA ATTAAAAGCC N 341

SEQ ID NO:3628

LENGTH:341

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04281

## SEQUENCE DESCRIPTION:

GATCGACCTG TCATGTTTT AAGGTTATCC AGGCTGTATA TCTCTGGAAN AGAAGGAAAT 60  
 GGCAAAGAGT GGGAGTCTGA GTCAAGTTG GTTTGNTTT NNNAAGAGAC AAGGTCTCTG 120  
 TAATCCAGGC TGCAGTACAC TGGCATGNCC ATGGCTCACT ATAGACTTGG GCTCAGCCAA 180  
 TCTTCCTGCC TCAGCCTCCT GAGTAGCTGG GNTTGGTTT CCCCAGGCC ATATGTCAGC 240  
 TTATTTACCC TACTCACTTG GTGTNTCCCA GNCTGCCAGC CATGCTGTT CATCCAGTATC 300

TTCTNNATGG GGATTACCTA TTAAGGGGAC TAACACAAAAA N

341

SEQ ID NO:3629

LENGTH:340

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04282

## SEQUENCE DESCRIPTION:

GATCATGGAA CCCCTCTTCC GGCAGTTGGC CAAATGTGTC TCCAGCCAT ACTTCCAGGT 60  
 GGCAGAGCGA GCTCTCTATT ACTGGAATAA TGAATACATC ATGAGTTAA TCAGTGACAA 120  
 CGCAGCGAAG ATTCTGCCCN NNCACTGTTTC CTTCCTTGTA CCGCAACTCA AAGACCCATT 180  
 GGAACAAGAC AATAACATGGC TTGATATACA ACGCCCTGAA GCTCTTCATG GAGATGAACC 240  
 AAAAGCTATT TGATGACTGT ACACAACAGT TCAANGCAGA GAAACTAAAAA GAGTTGCTAN 300  
 AANTGNAAGA NCGGGNNGAN GCATGGGTTA AATTAGAAAAN 340

SEQ ID NO:3630

LENGTH:339

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04284

## SEQUENCE DESCRIPTION:

GATCTGCCAC ATGTNTGAGG GTTGCAGAGC CCGCTGTGGA GGTAAGATTG GAAACACATG 60  
 NAGCAGAGGG AAGACATTGA AGAAAACATC TCTNCTGGAA TATTTGGAAA AGAACACTCT 120  
 TCTGGACCTG GTTGAAGCAG GAAAGATGGA GGCAAAGTAG TGAAATAATC CAGAATTCA 180  
 ATGCTTTNA ATGTNCTTAG TGATACTGAC CTGTGATAAT ATAATTCCA GGGAGGACTG 240  
 GGAACCTTAT CTCTGAGAT ATTCATCAA TTATTTAAT TTAAGCCTCA TTCTCCTTT 300  
 GTNCATTTG GTAATAAACT GGATTGAAAT TGTGAACAN 339

SEQ ID NO:3631

LENGTH:339

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04285

## SEQUENCE DESCRIPTION:

GATCCAGCCA GTATAGAACT AGCTCTGTAG GGGTGAGGAG GACTNTGCTA TGTATCATCC 60  
 TNGATTGTNT TCCTTCAAGG AGCATTGCAC TTGCCTTCCC AGACCTTCCA CCTTAGGTTC 120  
 TGCTGCAAAA AGCACCACTG CTGAAGATGC TGCAAGACCA AATCATAGCT CATAAAATCA 180  
 GGTCTGAGA TAGTTACCA TAAAGAGGAA TCCTTTGAGT GTATGCCATT GGTGAGCCGA 240  
 TGAGCATGGA CCATAGAAGG GCTCAATGTA GANTGAAACT ACCCGTGTGT AAAAAGAAGN 300  
 TTGGNTTAAA ATGGCTACTT TGGATGGGNA CCAGTGTCTN 339

SEQ ID NO:3632

LENGTH:337

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04286

## SEQUENCE DESCRIPTION:

GATCAGAGGG GAAACAAACG CCAAGGGGT GGGATGGGT CGGCATCTGG AGTCTGAGAC 60  
 AGCTGCCCTC CTGCGTCAAG GGCTGGGGC CTCAGCTTCC ATCCTGTGCC AGCCTCCATG 120  
 TGGACAGCTC AGCTTATTGT CCACCACCTG GAAATNCCTC GAAGCTTCAT NNGTCCAGGT 180  
 CAAGAGAACATC CTGTTCCAG ACCTCTGCC AGCCAGGCCT TCCCAGCTCA GGGCTGACTC 240  
 CTGCACCAAG TGACGCACTT TTNATAACTG GTCTACCAAT GNCTCCCCTT CAAGTGAGAA 300  
 CTACCCTTA CATTAGGAG TGTGGCCCCG CAGTAAA 337

SEQ ID NO:3633

LENGTH:337

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04287

## SEQUENCE DESCRIPTION:

GATCCCTGTA TGCNGCCAAG GATGGGACTT CCAGCTAATG AATTGTACA TGCAGCCAAA 60  
 TTTACAGGAA TTTTTTAAA AGGCAGAAAA ACTTGAAATA CCAACATTCT GGCAAAAAAN 120  
 ANTCAGTTT ATGANGAGTA AGTGGAACCT GGGNTGCAGG ANCAAAAGAG GGAAATGTTG 180  
 GGCAAACATT TTNNNTGGAG CTCCCTTCGC TGTTGTGCAG CAGAAACAGA TTCTNAGTTC 240  
 ATTTTTACTC CCACTGTATT ATAGTTTANC AAAANTNGTT TATATCTTGG AAAAAAAANCT 300  
 TTCTGTTAA AAAANTTAAN CAAGTGAATG TNNGAAN 337

SEQ ID NO:3634

LENGTH:390

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04288

## SEQUENCE DESCRIPTION:

GATCCCAC TG ATTGGCCAGC CGAGCGAGAA CCAGGCTGCT GCATGGCACT GACCGCCGCT 60  
 TCCAGCTTCC TCTNAGCCGC AGGGCCTGCN ACGCGGGCAA GCGTGCTGCC TCTNTNCTGT 120  
 GTCGTTTGT TGCCAAGGCA GAATGAAAAG TCCTTAACCG TGGACTCTTC CTTTATCCCC 180  
 TCCTTTACCC CACATATGCA ATGACTTTNA ATTTTNACTN TTGTAGTTA ATCCTTTGTA 240  
 TTACANCATG AAATATAGTT GCATATATGG ACACCGACTT GGGAGGACAG GTCCTGATTG 300  
 TCCTTCTCC AGTGTACATG TTTACTCAC ANATAANATT NTTTCAGCAA GTAAAGNGGG 360  
 ANNGGGTTT GGNGNGNGG NGTGNNGGTGN 390

SEQ ID NO:3635

LENGTH:73

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04289

## SEQUENCE DESCRIPTION:

GATCTGGCCA TTTGGTACAT AATCCAGCAC AGATAAGCTG GGTGGTAATG ATAATAAAAAA 60  
 TGGTTTCTC AAA 73

SEQ ID NO:3636

LENGTH:328

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04290

## SEQUENCE DESCRIPTION:

GATCACCTGG GTTTCTTTAT TTATCGACTG TGTCACTGACA AGGAAACTTA CAAACTGCAA 60  
CGCAGAGAAA CTATTAAGG TATTCAGAAA CGTGAAGCCA GCAATTGTT CGCAATTGG 120  
CATTTTGAAA ACAAAATTGC CGTGGAAACT TTAATTGTN CTTGAACAGT CAAGAAAAAC 180  
ATTATTGAGG AAAATTAATA TCACAGCATA ACCCCCACCT TTACATTTG TGCACTGATT 240  
ATTTTTAAA GTCTCTTTC ATGTAAGTAG CAAACAGGGC TTTACTATCT TTNCATCTCA 300  
TTAATTCAAT TAAAACCATT ACCTTAAA 328

SEQ ID NO:3637

LENGTH:328

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04291

## SEQUENCE DESCRIPTION:

GATCCTGTGA ACCGTTACTT TGCTAAATC ACTTGAGACT TGAGTNTTA ATAACAAAGC 60  
ATCAATATTC ACTAAAGTCA ATCTNTTTN ANTTTCTGTN ACTTGGCTAG AAGCTCTTGA 120  
CACTAAGGGA TTAGTGTAA TTTCCCTGG GGGTGTCCA CTAGGGCATT ACTGTATAAT 180  
GACTTGATGT TGCCACATAG ACTTCAAGAT ATATAATATT TTNAGGATT TTTGATTGG 240  
CCTATGTTT ATTGCATAGT GTGAACCGTG TAAAGCTTGG TTAACCTGTA TATAGATAGC 300  
TTATTGTTGA CTAGTTATAG TGTATTN 328

SEQ ID NO:3638

LENGTH:326

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04292

## SEQUENCE DESCRIPTION:

GATCCTTCC CTGGATACAT AACCTCTAGTA GATAATGTTA CTGCAAGATG TAATGNCCAA 60  
ATCCAACCTA CTGCAATNT TACTATGGAA ATCTCAATGC AAAAGTAGCC TTTGTNATT 120  
TTTTTTAAA CCGTCTCCAT AACAGANCAC TTAGAATTAT TAGCCATTG CTGCAAAGTA 180  
TTTGTTTAA AATGTCTGGC ATATACACCA CTAACATTAA ANTGCCAAC ATTGGTCTA 240  
TACGTAAAA ACCTAGANGA AANGCCCTGT TGGAGTTTG ATGTAGAGTG CAATANTACA 300  
TCAATAAAGG TATTTAAAAA TGGAAA 326

SEQ ID NO:3639

LENGTH:326

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04293

## SEQUENCE DESCRIPTION:

2153480

GATCTGTTGT ATGTAATAAG TAACACAGAG TTTAAAACA AATTAATTAT TTAGCTTAT 60  
TGAAGTTGT NTTTNCCTT CCGAACCTGG AGTATCATAT TATAAACAGC AGTTCACAC 120  
CAGAAATAGCA GTGCCCTNC TTTTGTACA TACTGATTGG NCCTTCCTT ACTGTTACGT 180  
GGACACTTC TATGTTAGTT TTGATGCATA ATTCTTGAA TCCTTTATA CAAACTAGAA 240  
TGTATGTGTA AGAATACCTG TCCCTGCAAT GTAGTAACTA CAAACTTATT TTTAAATAAA 300  
TAGAAAACCTT GTTTTCTAA GCTAAA 326

SEQ ID NO:3640

LENGTH:325

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04294

SEQUENCE DESCRIPTION:

GATCCAAGAG TTTAGTGATT TCAAAAGCCT TGGTCTCAGG AGAAGATTAA ACTTCATAT 60  
TGGGCAGTGG TTCACTTAA AACACACACA TACACACACA AAACAATTAA TTAAGAAATC 120  
CTAATAAGTA ACATACCCAA AATGCTCTGT CTTGAGTCAT GAGAACCATC AGTTCTGAT 180  
ATTGCTAGA CTTGCATCTA GAGGTACGTT GTAAAATTCT TTTAGGCATG TGTTAGATTT 240  
CTGTGTAAAC TTTGTTAAA TGTAACCTTC ATACTACATT GTCAGTTTT GTCTTAATAA 300  
AACTATAGAT TTATAATCCC TGAAA 325

SEQ ID NO:3641

LENGTH:391

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04295

SEQUENCE DESCRIPTION:

GATCGGAATT TCCACCAATC AGCGGGAAGC CTCGGCCCTG TAACTGCTAA TGGGAGACAG 60  
CAGCGCCACG CCACAGGCTT TTCCCCGGT TTCGGGAGGG NTGGGGAGCC AGGTGGGCT 120  
CCCGNCCAGA CCCTTCCCG AGGTCCGNCC TCTCCGCCTT NTCTNTAAAT TCCTCTTTG 180  
AGTNCCCTCC CTTCCGGTT AGAGGCGGGG GTTGGCCGT AGTTGTACAC TCAGTCACCC 240  
TGAACGTGG AGGGNGNGGG NCTCCNTGT GGACTGATT GCCTGGGGAT TTGGTNTGTT 300  
TTATTAAGGG ATTTGAAAAA ATTCAAGATGG ACTTNACTAG TATGGACTGT TNGGTAAAT 360  
ATTNGCTTNC NGGGTTAATA AAATGGACAG N 391

SEQ ID NO:3642

LENGTH:324

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04296

SEQUENCE DESCRIPTION:

GATCCAGTCA ATACATGCAG ACCAGTAAAAA TCTGATTGT GCAGAGTTCT CCATCTGACT 60  
CTCACTTATT TCTGTAGATA TATACATATA TAAATACAAG TATGTNCTTA CGGCACAGTA 120  
TTGCTGACCT TTAGTTCGAG GTTTGTCGG TTGTTGTTA TTTTCTCCT CTTGCAAGTG 180  
CTATCCATGT GAGTGTGTGA AGTTCTCTA ATAAGTAAAAA CACAGGCCT TTTCCCTGTT 240  
TGTGTTGTGT TAGTTTATTG TAAACAGCCA TTTGTTGAA ATNATTATTG GCATTAATT 300

01197

ATAATTATG ATTTCAAAG CAAA

324

SEQ ID NO:3643

LENGTH:323

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04297

## SEQUENCE DESCRIPTION:

GATCCAGTCT AGGCCCGTAT GTTGCATTT GCTGTCATGT CTTCTTAGTC TCCATCNCAT 60  
 CTCAGTGGTC TTTCTTTTC CATGACTGTG ACAGAAATGA TTTGTATCCT TCATATATCT 120  
 GCAGTCACAT GAAGTCTATT TGCCCCTACTA CTGGTGACGT AAATTTGGT AACTTGGTTG 180  
 AGGGTGGTAC CGTCTAGGTT TCTCCATATT AAGTTGCTAT TTNCCCTGT GTATTAATA 240  
 AGTATCTTAT AGGGAAATCC TTGAGACTA TGTAATATC ATATTACATG TATTNGCCT 300  
 GTTTAGCAT CTTTGAAGA TAN 323

SEQ ID NO:3644

LENGTH:320

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04298

## SEQUENCE DESCRIPTION:

GATCTGGAGC ACAAGGAACT CCCATACATT CCTAGTGGGA ATGCCTAATG TTAGAGTCTG 60  
 GAAGACATTT TGGCAATTNC TTAACCAAGC TCTTCTTACC ATAAGATGAA GCAACTCCAC 120  
 ACCTTGGTAT TTACCCAAAC GAGTTGAAAG CTTATGCCA TACAAACACC TGTACAAGAA 180  
 TGTCTATAGC AGCTTTATTC ATAATTGCCA AANCTTGAGG GCATCCAAGA TATCACTTAA 240  
 TGGGTGGACA GATAAGCTGT GGTACATCTA TACAATGGAA TATTAAGGTG CTAAAAAGAA 300  
 ATGAGCTCTG AAGCCACAAA 320

SEQ ID NO:3645

LENGTH:319

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04299

## SEQUENCE DESCRIPTION:

GATCGGGATT AATATTAGTG CATTTTAAA ACACCTAAAAA GTTTACAAN TGTATTTGTG 60  
 TATTTCTGT TTTGGTGCCT GTTTATAGA AGATGATTGA NGAATCACTG AAGATTTAAA 120  
 TAAAAAAAGGA ATTAGAAATG GAAAATGNAT TAGAAATGAG TAATCAAGAA ATAAAAGACA 180  
 AATCTGCTCA CAGTGGAAAT CCTTTAGAGA AATACATGAA AATCATCCAG CAGGAGCAAG 240  
 ACCAGGAGTC GGCAGATAAG AGCTCAAANN NGATGGTCCA AGAAGGCTCC CTAGTGGACA 300  
 CGCTGCAATC TAGTGACAN 319

SEQ ID NO:3646

LENGTH:318

TYPE:nucleic acid

TOPOLOGY:linear

2153480

CLONE:HUMGS04300

SEQUENCE DESCRIPTION:

GATCATAGAA GAAGAANCCA GTAATTGANC AAATCCTATT TAATGACATC CTTGTAGCAT 60  
AGATGGTCTA TAATGCTGAC CACAGATTTC TTAGAAATGC TGCTCTCTCT ATTTAACTAA 120  
CATTTTGTC AGTTTGCCT CCAGTGGAAAG CAGAAAGGGT TTTTNCAGCT GTAAATCCT 180  
AAAANTCAAT ATAATTNATT TATGTAAGAA AAATAACTCA ATCAATATAT TTTTGAACCT 240  
TTTAAGTACT AATTNNNTNT TTATCAAGTA GAAAAAAAT GTATGGCCC TAAATCCTTA 300  
AAATACAAT GCTATAAA

318

SEQ ID NO:3647

LENGTH:317

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04302

SEQUENCE DESCRIPTION:

GATCCTGAGG CTTGGGCTGA ATTCTGCTT GAAACTTGT AATCAATCAC ATATTCTTA 60  
GAAAATAAGA CCTACTCATC TGTGAGAACAA GAAGCTTTAT CTGTGATAGA ATTGCTGCTT 120  
AAAAAAACTTG AAGAATCTAA ACAGTGGGAA TGTTTGACAT CTGAATGCAG AGTGCCTCTA 180  
ATTGAGTCTT TAGCTACTAT GGAGCCAGAC AGCAGACCTG AACTGCAGGA GAAAGCAGCG 240  
TTACTGAAGA AAACACTTGA AAATCTGGAA TAANTTAGAN GGGGAAGAAA CAAACAAGTG 300  
CCATGTTCAT TGGGGGN

317

SEQ ID NO:3648

LENGTH:317

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04303

SEQUENCE DESCRIPTION:

GATCCTCTC CTTCCCTGGG ATACAGCACC TCCACCCCTGC CAGGCCACCC NTGTAAAGGC 60  
AGCCAATTCA GAGCCACCTC TTATGCTGC ATCTCCCCCA ACAATTCTG CTGGAAACC 120  
ACTCCTCGTA TGGTGTCACTC TACACCAGTG GGTTTCAAGC TTGAGAAAGAA TCAAGTTCTA 180  
CAGGGCTGCT TAAAACACAG GTTGTGGGT CCTGTNTCTC AGAGTTTG ACTCAGTCTT 240  
GGTTGAGAAT TTTCAGTTCT AGAAGCTCTT GGGTAATGCT AATCCTCCTG TTCTAGGGC 300  
CATAGTCATT GTCCATN

317

SEQ ID NO:3649

LENGTH:317

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04304

SEQUENCE DESCRIPTION:

GATCTACACG CGGCTGGCCA CCATCTACCA CAACTNCCTC CTGGACCGTG AGAAGTCGCT 60  
CTTNTTCTAC CAGAAGGCCA GGACCTTCGC CACAGAGCTC AACGTCCGCA GGGTCAACCT 120  
GCCTCCTCTG CCACTCTGCG GGTGGGCCCT CGGTTGGCC CCCAGCCACC CTNGCTGAGG 180  
ACAGCATCCA AGGGAGTGGG TTTGTGCAA GGGCTAGGGG TCTCCTGCCT NTCCTGGTGT 240

01199

2153480

CGNCGGTGGC TCATTTCTN GCAAATNGAG GCACGAACGC AGGGNCCAAA TAGCAATAAA 300  
TGGGTTTGT TTTTAAA

317

SEQ ID NO:3650

LENGTH:317

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04305

SEQUENCE DESCRIPTION:

GATCTATGCA ATTTTAAAC TAGTAATGGG CCAATTAAAA TATATATAAA TATATATNTT 60  
NCAACCAGCA TTTTACTACT TGTACCTTT CCCATGCTGA ATTATTTGT TGTGATTTG 120  
TACAGANTT TTAATGACTT TTTATAATGT GGATTTCCA TTTAAACC ATGCAGCTTC 180  
ATCAATTTT ATACATATCA GAAANGNNCG ANTTATATCT AATTATACA AAATAATTAA 240  
ACTAATTTAA ACCAGCAGAA ANGTGCTTAG GAAAGTTATT GTGTTGCCTT AGCACCTCTT 300  
TCCTCTCCAA TTGTAAA

317

SEQ ID NO:3651

LENGTH:316

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04306

SEQUENCE DESCRIPTION:

GATCTGAATT CTAAACGTC TTCATTGTT TACTTTAGG ATGAGGAAGT ACAGACAATT 60  
GGTCAGATAG AACTGTGCCT CACTAAGCAA GACCAGCAGC TGCAAAACTG CACCGAGCCG 120  
GGGGAGCAGC CGTCCCCAA GCAGGNNGTC TGGCTGGCAA ATGGGGCCGC CGAGAGCCGG 180  
GGTCTGAGAG TCTGTGAAGA TGGCCCAGTC TTCTATCCCC CACCTAAAAA GACCAAGCAT 240  
TGATGCCCAA GTTTGGAAA TATTCTGTTT TAAAAAGCAA GAGAAATTCA CAAACTGCAG 300  
CTTTCTAAAA AACAAA

316

SEQ ID NO:3652

LENGTH:374

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04307

SEQUENCE DESCRIPTION:

GATCCTTGGG TTGTAAGAG AGTAGAAACC CTAGGNAGCA GTGCTTTGG GTCCTAGAAC 60  
CTGTTGAGTT TCTAATGAAT ATTGTAGAA TCTNATAAAA CAGTTAAAT ACAAGCTAA 120  
GTGGCTTATG AATCCTGTNA AGCTCATTTA TGGNCTAGTG TAAAACAATG TGAAGCTCTA 180  
CTAAGTNCTG TCCTTAATCA TAAATAATAG CCCCTTGNNG NCTAGCCTGT CCTCTGGTCA 240  
CCTTACCAAGT TGGGTTGCAC ATTGTGTGGT CGTCCAATTA AACTCAATCT TNCGTGTGNC 300  
AGGNGNTAGT CTNTCCAATC ATGNCATAGN TTTCATCTGG TTTTGNCCTG GTGGACGNAC 360  
CTTCGGANTN ANTN

374

SEQ ID NO:3653

LENGTH:316

01200

## **DEMANDES OU BREVETS VOLUMINEUX**

**LA PRÉSENTE PARTIE DE CETTE DEMANDE OU CE BREVET  
COMPREND PLUS D'UN TOME.**

**CECI EST LE TOME \_\_\_\_\_ DE \_\_\_\_\_**

**NOTE: Pour les tomes additionnels, veuillez contacter le Bureau canadien des  
brevets**

2153480

## **JUMBO APPLICATIONS/PATENTS**

**THIS SECTION OF THE APPLICATION/PATENT CONTAINS MORE  
THAN ONE VOLUME**

**THIS IS VOLUME 4 OF 8**

**NOTE: For additional volumes please contact the Canadian Patent Office**

## **DEMANDES OU BREVETS VOLUMINEUX**

**LA PRÉSENTE PARTIE DE CETTE DEMANDE OU CE BREVET  
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2153480

## **JUMBO APPLICATIONS/PATENTS**

**THIS SECTION OF THE APPLICATION/PATENT CONTAINS MORE  
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**THIS IS VOLUME 5 OF 8**

**NOTE: For additional volumes please contact the Canadian Patent Office**

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04308

SEQUENCE DESCRIPTION:

GATCAGGACC AACCTGGAAA ATGCCAGATT TGGCTATGCT TTTTAANACA TTNATTTGGA 60  
CAGCTCACCA ACCCCTGAAG GGGCCGTTAA GCCTGGTTAG TTTTNTACCT ACTCCGAGTN 120  
TCCTCCCCCTG CCCCCACCAGA TTGCTGCAGG GGCAGCGGTGT GCCTGGNAGC CAAATTNTG 180  
ACACTTCTTT TTCCTCATGC ACTGGTTTA CACAGCTGTN ATTTTTNTT CAAAATTGCA 240  
GCAGTCCCCAC AAGATGTNTG CATTGGACA AATAGTACTT AAAAACAAAN CAAACAAGCA 300  
CTCAGCCCCAG TTCCCTN 316

SEQ ID NO:3654

LENGTH:315

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04309

SEQUENCE DESCRIPTION:

GATCTAATGC AGAACTTATC AGATATTGTG AAAAATCAGT GTGGGAGGTA TTCAGTCAA 60  
AGTCAGAAGG AAATGTATTA TCCTTATAAT TTCAAACCTT AAGAAAGCCT AAATTACCAA 120  
TTGCATATCA ATTTTTTTG ATAATGTAAG GAAAACCTAA ATCCCCTCCA TATCCTAATT 180  
GGCATTTATA ATAATATGAC ACTTAACCTT GACAGCTAGA GTCTTACTTT ATGCTAATGC 240  
TAGATATCTA TTTTNAANTT CCACGTGTGT AAACATGCTA TACTCTCTG ATATTAANCT 300  
TACTAAGTAC ATAAA 315

SEQ ID NO:3655

LENGTH:315

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04310

SEQUENCE DESCRIPTION:

GATCCAAGAA GAACTAGAAA AAAAGTTGTT TGCAAGGCTTG CAACCTCTCA NAAATTTAA 60  
GGCTAGCTCT TCAACTATGT CTTNAAAAA GAATATGTCT GCCCACAGCA GCCAGAAGTG 120  
ACAGCATTCT TGTGAATGTT TACATCCTGC TGCTGATAGG TTCAAGGAAT TCTTTAAACC 180  
AGATTCTGCT GACATGAGAA GCTCCAGTGA TTGTTTTTT TGAAGGTCTG TATCAGAGCA 240  
AGCCTAACAT CTAAATAANG TTGATTCTG GATTTCCAG GTGGGAAATA AATAAAGAAA 300  
ATTTGGCTTG TCAAA 315

SEQ ID NO:3656

LENGTH:347

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04311

SEQUENCE DESCRIPTION:

GATCCGTGCC CGCNTCCAGG AGAAGTTGTC ACCTCCCTAC AGCTCCCCAC AGGAGTTGC 60  
CCAGGATGTG GGCGCGATGT TCAAGCAATT CAACAAGTTA ACTGAGGACA AGGCAGACGT 120.

01201

2153480

GCAGTCCATC ATCGGCCCTGC AGCGCTTNTT NGAGACGCGC ATGAACGAGG CCTTCGGTGA 180  
CACCAAGTTC TCTGCTGTGC TGGTGGAGCC CCCGCCGATG AGCCTGNCTG GTGCTGGCCT 240  
GANTTCCCAG GAGCTGTCTG GTGGCCCTGG TGATGGNCCC TNAGGCTGGG GGCCCCATGG 300  
TCAGGCCAGN NTGGGTTCTG TTCTNTGGNN CTTGTCANN C NNAANCN 347

SEQ ID NO:3657

LENGTH:313

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04312

SEQUENCE DESCRIPTION:

GATCATAACT GAACCAGAAT TTGGATTATA GANGTGCACT TCCTAGCTGT TTTTATTAA 60  
GGTATAGGAA CACACAATGA AACCTTATG TTTAGAATGT AGCAGTAACA ACAGAGGGTA 120  
ACTACACTGC AAGACTAAA TGGTTTGAGC ATGTGACACT ATCCCTTTGT TGGGGGGAGC 180  
AGGGTATAAN ANTATACATA CAGGAGAGTA GTTTAATAGT AAAGTTTAT ATGTATGTT 240  
AACTTCCATG ATATTATNA TTNGTAGAG ACATTGTGA TTGTNTAGAG TTCTNGTNNT 300  
TNTTCTATTN ATN 313

SEQ ID NO:3658

LENGTH:307

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04313

SEQUENCE DESCRIPTION:

GATCTTAAAA GTGGAAAGCA GAAAAAAATAC TGTTTCTGA AATTNAAAAG TTTTGGCAGT 60  
GCCAGCAGG CCCTCAACAT TCTCACAGGC AAGGACTGGA AGCTGAAAGG CAGGCATGCC 120  
CTAACCCCCA GGCACGTCCA TGCTGGNTC AGAGGCTTAC CACCTGANTC AACAAAGGCTC 180  
CCAGGGCTTC GTGTTGTACC TCCCCCCTT GAACAGGGAGG TCTTGCAGAC TCTGAAACTG 240  
GACCACCCGA AGATAGCAGC CTGGCGCTGG ANGCCGGAAG ATTGGAAAGC TCTACAACAG 300  
TTTGTGN 307

SEQ ID NO:3659

LENGTH:306

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04314

SEQUENCE DESCRIPTION:

GATCCCCAGA GAGGTGGCCC TGGACCTGGA GTCAGGAGGC GGTGTCCAGA AGAGTCGCTC 60  
ATCAACCCCCG GGTTCAAGAG TAAGAAACCA GCTGGTGGCG TGGACTTCGA TGAGACCTGA 120  
AGGTGCAGCA CAAGCGTGGC CCCGGGGGA GTCCGCCTAT NAGGGGAGAG GCAGTCCTTG 180  
AGGCCCCCAT CAGAGACCCC CGGCCACAC CTCCACCTGC CTGTCCCTGGG CCAGGACTAA 240  
CACGGCTCCT CAAATTCCCTT CCCTGTCAAA TAAACAGCTC CCTTGGTTGG AGGCTCTNGT 300  
GGGAAA 306

SEQ ID NO:3660

01202

2153480

LENGTH:371

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04315

SEQUENCE DESCRIPTION:

GATCCCTGA GCAAGTCAGA AGTTACTCTC ATCAGTCGTT CATGGTCACA ACCTGAGGTA 60  
CTCTGCTGAG TGGGCAAGGC TGAAGAAGAG GCCTGTGGAA TGCAGCATT CCTGCTGGAC 120  
AGAGCAGGGC AGGCAGTTCT ATGCCCTTGGA GCTCCTGACT GCAGGGACTC TGTCCCCACA 180  
CTCAGAAAAGA CTCAGCTCAC TCAATGAGAG AATGTGATT ACTTTATAGA ACGTATAATC 240  
AACTTTGTTG AATAATTGT TCTATTAAGG CTGTCTAAAG TATGTNATGT CTTCATCATA 300  
GTATGAAGTG TTGAAAATTA ATAACGGGCC TAGTTAGGA AAAAGCTGCT TAAANGNGTG 360  
TGGCCCGTAN N 371

SEQ ID NO:3661

LENGTH:304

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04316

SEQUENCE DESCRIPTION:

GATCTGTATT GATATTGAT AGTGAAAATG TTTATTCAAT TTTCCCCAA AATGTATTTG 60  
TTCCTCTTAC TTGTTTATTG AGCTGTGGTG ACTTCAAAAT ACTTTTCCA GGTGACAAAA 120  
AAAAAACTCAG AAAAATTTT AATCTTAATT GCATTAATAC TATAAAATTGA TTTGGAAGGA 180  
TTAACACATT TATAATATNG GNNTTCCCTC GCAGTAATGT GGCATATTCT TCCNNNNGTT 240  
CAAGCATTAA AAAAATCTCT TAGCAAAGCT GCACAGCCTT CTTCATAAGG GTTCTCTATA 300  
TTTN 304

SEQ ID NO:3662

LENGTH:303

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04317

SEQUENCE DESCRIPTION:

GATCTGCGGT GGGCCAAGAG TATCCAGGG AAAACCTGTC CCTGGCAGGG CTGGAGCAGG 60  
GACACTCCAG GCCCAGCTGA GGCTTCCCTGC TCTGCATGGC AGGGGACATC TCTNACCTGG 120  
TCAGGACCCCT GGAGGTGGGA CAGCTGGTG TAAGGGAATG TNAGCGCATC AGGGTTGGGG 180  
AGAAGCAGTG GGTGGTCCAG GAAACCCCTG AAACAGCTGG CCCTGGGTC CCCTTTCAAG 240  
TGTTTCCAGT TGTGGCAAGG GGTCAAGGAG ACCTTGATT GCAAATCTNT TAGAAAAAAC 300  
AAN 303

SEQ ID NO:3663

LENGTH:302

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04318

SEQUENCE DESCRIPTION:

01203

2153480

GATCTGAAAG ATTACATTTA GAACATTTAG TACTATTACA CTCTCAGAAA CTGTNGTAAA 60  
AAGTCACATT TTCAAAACTT CATGCATATT GTATTCTGT TGGAATAAG TCCTATAGTT 120  
TCTTAATTGT CTTCATGCCG TCCATATTAA ACAAACATTG CAAGTCCTT TTATATTGG 180  
GTAATNATT GTAATTTAGT GAAGGGAGCT AGGGGATGTT TTCTTCCAAA GGGAAATTAA 240  
AATCAATTAA ATGGTATTTT GAAAGTAAAA TACTCCTTAA CGTGTCAATA TTTTAAAT 300  
GN 302

SEQ ID NO:3664

LENGTH:301

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04319

SEQUENCE DESCRIPTION:

GATCCTCTCA GAGTGCAGG CATCCCCCCC GNACCAGCAG AGGCTCATCT TTATNAGGCA 60  
AGCAGCTGGA AGATGGCCGC ACTCTTNTG ACTACAACAT CCAGAAAGAG TCGACCCCTGC 120  
ACCTGGTCCT GCGCCTGAGG GGTGGCTGTT AATTNTTCAG TCATGGCATT CGCAGTGCCC 180  
AGTGATGGCA TTACTCTGCA CTATAGCCAT TTGCCCCAAC TTAAGTTAG AAATTACANG 240  
TTTCAGTAAT AGCTGNACCT GTTCAAANTG TTTAATAAN GGTTTCGGTT GCATGGTAA 300  
A 301

SEQ ID NO:3665

LENGTH:300

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04320

SEQUENCE DESCRIPTION:

GATCTGAAAA ATGAAGTTG GTATCAAAAA NGTCATGACC CTGTATGTA AGCAGAAAAC 60  
TTCAAATCTG ACTGTTCCC ATTACCTGCT GAAGTATGTC TCCTGTTCT TTTCAAAGAG 120  
GAAGANGAGT TTACAACAGA TGANGCAGAT GAAACTAGGA GCAATGAAAC CCAGAATCCT 180  
CATAAACCAT CACCTAGCAG GCTGTCAACA GGTGCATCTN CTGATGCTGT CTGGGNTAAT 240  
GGCATTGATG ATGCTTATTT TTTAGAAGCT ACTGAAGATG CTGAATTAGC TGAAGCTGCN 300

SEQ ID NO:3666

LENGTH:300

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04321

SEQUENCE DESCRIPTION:

GATCACTNAA TGGTCAAGTG GAACAAGCAC TACACGACTA ACCCCTATTG GGGTTTTAA 60  
CTTAAGGGAG GCTAATTCTT AATTAAACT GCTCGAGATA TGAGTTCTGC AAAAGGTGGT 120  
CCGCATCCTT GGCCCTCTGG ACATTATCAC TAAATTGCTT GTGCCGTAA ACAAGAATAC 180  
TGACCAGAAT GCTCTTCATG TAGCTTATAC AGTTGGTTCA CTTCATGCCG TTCTGACAT 240  
GTTTATTCT ACCCTTAATG CAATGAAATG TTCTATTAAT AAAAAACCAC TTTATATAAA 300

SEQ ID NO:3667

01204

2153480

LENGTH:417

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04322

SEQUENCE DESCRIPTION:

GATCTTCTG GCTCCACTCA GTGTCTAAGG CACCCCTGCTT CCTTTGCTTG CATCCCACAG 60  
ACTATTTCCC TCATCCTATT TACTGCAGCA AATCTCTCCT TAGTTGATGA GACTGTGTTT 120  
ATCTCCCTT AAAACCCCTAC CTATCCTGAA TGGTCTGTCA TTGTCCTGCCT TTAAAATCCT 180  
TCCTCTTCT TCCTCCTCTA TTCTCTAAAT AATGATGGGG CTAAGTTATA CCCAAAGCTC 240  
ACTTTACAAA ATATTCTCT AGTACTTTGC AGAAAACACC AAACAAAAAT GCCATTTAA 300  
AAAAGGTGTA TTTTTCTTT TAGAATGTAA GCTCCTCANG AGCAGGGACA ATGTTTCTG 360  
TATGTTCTAT TGTGCCTAGT ACACTGTAAA TGCTCAATAA ATATTGATGA TGGGAAA 417

SEQ ID NO:3668

LENGTH:298

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04323

SEQUENCE DESCRIPTION:

GATCTCTGAA AGCTCAAATG GATGGAATT AGTTGCGGG AAAGAGGCTT TGCTTGCAC 60  
ATATCAGGCT TAGGACTGTG GGAGGGCTTAA GAAGCAGATG CTTCTTNAT TGTACTCTT 120  
TNCTGCCCTT GTTTTTGAA GGCTCTGACT TATAACTNCT GTATCAGAAG AAACATTTG 180  
ACAGTGTCTT GGTTGGAGAT GAACATCCCT AATTGACATG TGATGACTAT TTCTNATTCC 240  
ATTCATCTAA GAGTCATTGA AATTTGTT TGCTTGTGTT TTTAGCTTCA AGGTCTT 298

SEQ ID NO:3669

LENGTH:294

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04324

SEQUENCE DESCRIPTION:

GATCATCTCT ATATCTAATT TGTATTATNA CTAATCTTAT TCCAACCTATT TNCTTTATNA 60  
TACTGAAACA GTTGTNCCT TCAGTCTGTG CTTGGCTAC CTAAAAGGGA AGGGCCCCCT 120  
ATCCCTGTAAT CACATGACTT ACTTCACCTT GTCAATCACT GAGAAGATTC ACCCTCCTTA 180  
CCCTGCCCTT TTGTCTGTG TGCAATAAAAT ACCAGTGGGC CTAGCCCTCT GGGACCACTA 240  
CCGGTCCCGG GGTCTTGATG GTAGTGNCC CANAGCCAG CTTGCNTNCN CAAA 294

SEQ ID NO:3670

LENGTH:293

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04325

SEQUENCE DESCRIPTION:

GATCAAGAGG CCACCAAGTT TACTTCAGCA CCAATGTGTC TTACTTTATA GAAATGTTGT 60  
TAATGTATTA ATGATGTTAT TAAATACTGT NCAAGAAGAA CAAAGTTAT GCAGCTACTG 120

2153480

TCCAAACTCA AAGTGGCAGC CAGTTGGTT TGATAGGTTG CCTTTGGAG ATTTCTATT 180  
CTGCCTTNN NTNCTNACTG TTTTATTACA AACTTACAAA AATATGTATA ACCCTGTTT 240  
ATACAANCTN GTTTCGTAAT AAAACTNTC CCTTTTTTA AAATGNAANT AAA 293

SEQ ID NO:3671

LENGTH:292

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04326

SEQUENCE DESCRIPTION:

GATCTATAGT ATTTAATGT GCATCTACTT TAAATNAGTC ATCTTGGGT TTNATAATT 60  
CCCTTATGTT CTTGCCCTC TACACTTGAA ATAACAAAAT GCCTTAATT TATGGATTAG 120  
TTCTCTTATA GTAGACAGGC AGCTATATGC AGCAAAACCA ATAAAGTTAT TTTCAACTT 180  
TCATAGTGT AAAATATCTT ATAACAGAAAT ACAAAACAGC TANGAAAACA TGCCACATT 240  
NATTTNGCA TTTCAAATA ATTNGTTTT GGTGTAAGCA CAGGATAAAA AN 292

SEQ ID NO:3672

LENGTH:291

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04327

SEQUENCE DESCRIPTION:

GATCAAGGAT GCAACCTCAG GTTGAGAAAG AAACAGGGTT CCCTGGGCC ATTAGACTGT 60  
TTGCAGGGCA TCACTGCTTC CCCCTGACAC CTCACAACTA GCAAAATTG TCTTTGTCTT 120  
TGGAAATNAT AGAGGGATTG GGGTATCCAG ATTGTGCAGA TGCAAACTTA GGCTGTCTTG 180  
ATGNNNACTT AGAACACACAG AAATGCTTT AAAATGCCTG TTTAAGATG GAATTGTTGT 240  
TTTNATAATT TGATTTAGT GCTAAATAAA TGATTGGCTT TGTACATGAA A 291

SEQ ID NO:3673

LENGTH:291

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04328

SEQUENCE DESCRIPTION:

GATCTAAAGG CTCTGGNTTT GCCTTCTTC AGTCTGACAC TGACTAACAA CCTCGACAAG 60  
GTGGGCATAT ACCTGGATTA TGAAGGAGGA CAGTTGTCCT TCTACAATGC TAAAACCATG 120  
ACTCACATTT ACACCTCAG TAACACTTTC ATGGAGAAAC TTTATCCCTA CTTCTGGCCC 180  
TGCCTTAATG ATGGTGGAGA GAATAAAAGAA CCATTGCACA TCTTACATCC ACAGTAATGA 240  
GTCATAATAT TATACAAATT CAGAGTGTAA TTAAAGAGGT TTTGAAATAA A 291

SEQ ID NO:3674

LENGTH:290

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04329

01206

2153480

SEQUENCE DESCRIPTION:

GATCCCAAAA GCTGTTTNA GGATAAGGA CAAGGAGAGG AGACAAGTGA CGACAGCCAT 60  
TCCCCTTGC AGCTATCTAC TGTAGTGACA GCCATTCTT GGTTGATGGG TTGGAAGTCA 120  
TCAGAGGTTT GAAGAATTAC ACTGGCCTT GTTTTCNNG AAATGCCGAC CATGGAGATG 180  
CTTAGAGTC TTCTCAAATA GCTTAGATGT TGTAAATGNGG TTAAGCTTG CTTCATAAAAA 240  
CAGGGGCCCT CAGAAGTTCT CCTTTAAATT TTTCANATAA AAAATTTAAA 290

SEQ ID NO:3675

LENGTH:288

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04330

SEQUENCE DESCRIPTION:

GATCTATCCC TGTCTCACTG AAAGCCCCCTG TGTAGTGTCT GTGTTGTTT CCCTTGACCC 60  
TGGNNNTTCC TATCCTCCCA AAGACTCAGC TCCCCTGTTA GATNGCTCTG CCTGTCCCTTC 120  
CCCAGTCACC AGGGTGGGGG GGACAGGGNN AGCTGAGTGC ATTCAATTG TGCTTTCTT 180  
GTGGGCTTTC TGCTTAGTCT GAAAGGTGTG TGGCATTCTG GGCAATCCTG TAACCTCAAC 240  
ATAGATTTTT TTTGTGTGTG TGGAAATAAA TCTGCAATTG GAAACAAA 288

SEQ ID NO:3676

LENGTH:285

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04331

SEQUENCE DESCRIPTION:

GATCAACCCC TGACCTAAC TGTATGTTA TCTACAGATT ACAGACATTG TATAGAAATG 60  
CACTGTAAA ATCCCTATCC TGTGTTGTTA TAATCTAACT ACCGGTGAT GCAGCCCCA 120  
GTCATGTACC CCCTGCTTGC TCAATCAATC ATGACCCCTCTCACACACATC CCCTTAGAGT 180  
TGTGAACCTT TAAAAGGGAC AGGAATTGCT CACTGGGGA GCTCAGCTCT TGAGACAGGA 240  
GTCTGCCAA TGCCCTGGC TGAATAAACCC CCTTCCTTCT TTAAA 285

SEQ ID NO:3677

LENGTH:285

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04332

SEQUENCE DESCRIPTION:

GATCACAAAA ATGGAACCCC CTGTTCATG CTTCTACAGT CCAGCCAGCC AATCTGAAGA 60  
TGTCAATTCTT ATAAAAAAAGT ATGACCAAAT GGCTATCTNC CACTGTTAT NTTGGCCTTC 120  
ACTGACTCTG CTAGGTGGTG CCCTGATTGT TGGCATGGTG AGATTAACAC AACACCTGTC 180  
CTTACTGTGT GAAAATATA GCACGTAGT CAGAGATGAG GTAGGTGGAA AAGTACCTCA 240  
TATAGAGCAG CATCAGTTCA AACTGTGCAT TATGAGGAGG AGCAN 285

SEQ ID NO:3678

LENGTH:282

01207

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04333

SEQUENCE DESCRIPTION:

GATCTCTGTG TTTGCAGTCA AAGGGCGGCT CACACATGGT CAAGTATTAT AAATNTCCTG 60  
TGTATCTNAC AATGGAATCT ATTCTACAAT TTTAAGTATA CGCTTTCTGT ATATGCCAT 120  
TAAGTGAAGC TTAATAATCT TGTNTTTNCT GTCCTCATAG ATATTTAAT CTGTGGCATH 180  
CTCCTGTAAT CTCAGCATT TGAGGAGCTG AAGATGAGAG GGTTGCTTGA GGCCAGGAGT 240  
TCAAGACAAA CCTAGGCAAC ATAGCAACCC TGTCTCTCCA AA 282

SEQ ID NO:3679

LENGTH:280

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04334

SEQUENCE DESCRIPTION:

GATCTGAGGT GATATGTTCT GAATGTAAGC ACCGTCAACA TCAGACACCT ACTCATGGAC 60  
ATGTGGTGC CGGATTTCCT TAAGATGTT CCAGAAATGA CTGATATTTT ATATTTATAC 120  
ATTTTAGATG ACAAAACCTTG ATATTTATTG CTGTCGCACA TTTAAAGTT TTCTTTTGG 180  
GTTGCTCTGT GNCANGCGT GGTTACATGG TGNTAAATCG GTACCTGATA ATGTACCCAA 240  
ATACTATGGC CAGATAATAA ATTGNGGTGC AAACAACAAA 280

SEQ ID NO:3680

LENGTH:278

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04335

SEQUENCE DESCRIPTION:

GATCACTGTG CAGTGGGACC ACCCTCACTG GCCTTCTGCA GCAGGGTTCT GGGATGTTT 60  
CAGTGGTCAA AATACTCTGT TTAGAGCAAG GGCTCAGAAC NCNNNAATAC TGTATGGAG 120  
GTGCTGAACA CAGGGNNNGT CTGGTACATA TTGGAAATT TGAGCAGAAC AAATACTCAA 180  
CTAAATGCAC AAAGTATAAA GTGTAGCCAT GTCTAGACAC CATGTTGTAT CAGAATAATT 240  
TTTGTGCCAA TAAATGACAT CAGAATTAA AACATAAA 278

SEQ ID NO:3681

LENGTH:277

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04336

SEQUENCE DESCRIPTION:

GATCANAGAN TNACAACTGT TCATTATAGT GGTGCCTTAG GCAATCTTN CAAAGTAAAT 60  
TCAGGGCCCC ATTGCTACTT ATGCCATATT TGGACATACT TTTTTTTCT TCAATTTGT 120  
AAACTTCCTG GAAAGCTGTC TTCACTAAGT ATCCCCNAGT CTCTATCTAT GNGGNTAGTA 180  
GTCAATGGAAA TAACACATAA AGTACGCCAG NAGTTNGNTG GAACGTGTTA GAAACTGTTT 240  
TGTGTTTNA TGGATGTCAT ACCTGNCANT ACATGTN 277

01208

2153480

SEQ ID NO:3682

LENGTH:275

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04337

SEQUENCE DESCRIPTION:

GATCTTCTT TACTGTGATGT GTCCTTCTNT TCGCAGATTG ATAACAGAGC TGTGCTAGAA 60  
CTGAATGCAA GCTTCCAAA ANTNTTCATA AAAAANAGCT TTACTCAGTG ACTTAATATA 120  
TGTNCTGTAT TAAAATTAAT GTGCTTTGTT GGGGTTTAAT TTTGGNATTG GTTTGGGTT 180  
TTNTTTTAG TTGTTTAAT GGTAAAGAATT AAGACATTT NTAGATTAA AAGAAAAATA 240  
TGAAATTNTC CATTAAATCA AGTAAAAATG TGAAA 275

SEQ ID NO:3683

LENGTH:269

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04339

SEQUENCE DESCRIPTION:

GATCTCCGCA GTCTTCAGCG CATTGGCCCC AAGAAGGCC AGCTAACCGT GGGCTGGCGG 60  
GAGCTCCACG GCCCCTTCAG CCAGGTGGAG GACCTGGAAC GCGTGGAGGG CATAACGGGN 120  
ANACAGATGG AGTCCTTCCT GAAGGCAAAC ATCCTGGGTC TCGCCGNCGG CCAGCGCTGT 180  
GGCGNCTCCT GACCGTCGTC TCCTCACTCC GNCTTTCAA ATTTTGAT AACCCCGTGT 240  
TGTGTAAATA CAGTTTTGC TCCGGTAAA 269

SEQ ID NO:3684

LENGTH:266

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04340

SEQUENCE DESCRIPTION:

GATCAGGCCA GTAGGGTGTG AATGCAGGCT GGAGCCCCCG AATGCCCAN NCACACTGCA 60  
GCATTGACCA GACCATCCGA AACCTGCGTC CCTGGTGATG TTCTCAAGCC TCGGAAGTGG 120  
CAAATGGAAA TAATATGGCC GGTGCGGTT GTAGGAGAGT TGTGACTTAG GCAGGAGTCG 180  
ACCTCCTCAA GTAATGGAAC GATTTCAAAG GCAGGCTGCC CTGACCAAAA ATATCTGCCA 240  
TGAATAAAGG TGCCTGAAAT CCTAAA 266

SEQ ID NO:3685

LENGTH:266

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04341

SEQUENCE DESCRIPTION:

GATCTACTTT CAGGATTATT TNTGTNTT GAACGTGACA GTNTGGATGA GGCAAGTNAG 60  
TNTAGATGCT GCGACCTGTC GAGAAGCAAT AGCTAGTGAA CACATTAGCT CCCTACATGG 120

01209

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GACGCAGCTC CCTCTGACAT GTGTCTCTGC CCTTAACCAA GACAGAAAGG GGGTAAATGG 180  
AGGATTGGNT TACTGTCTTT GCTGGTTAGT TTTGTGAAAT TTTAAAAATG TTCAACTTTT 240  
GANTAAACTC CTTAAACTT CTAAA 266

SEQ ID NO:3686

LENGTH:270

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04342

SEQUENCE DESCRIPTION:

GATCTCCCTC AGTNGTCTAC CCACTTCCGT CATTGTCCCTC CGCTAGAATA ACAGAGTAGT 60  
TGGTAGTCAT GGCCAGAAGG GGGGTGGGGG CAGTGTGAGG ACTTGGGTT TCTGTGCTGT 120  
GTGACACAAG GAGATAAGTG ACAATNTGA AGTCCTAACT TGCACTATTG TAGAAAGTAT 180  
AGTGGTGATT TTTGTGAAAG GATTGAAAGT TTTAAAAAG TACCAAGTTC CTGAAATTCA 240  
ATAAAATATT TTTATTAATT TTAATGGAAA 270

SEQ ID NO:3687

LENGTH:264

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04343

SEQUENCE DESCRIPTION:

GATCTCAGCT CACTGCAACC TTCACCTCCC GGGAGCATGC TGCTCTATCT TTTTTNCAG 60  
ATGTTTGAGC TATTCCAGGT TTTTGGAAT TTCTGTTGNT TTGTTTGTT TTTGCTTT 120  
CTACATAATT GTTTGGATAA TCTTGTCACT ATCTACGAAG TGCCCTGATA GTAAATATAT 180  
NAACCCTGTG TATCAATNTG GGGTAATTNC ACATNTTTT CTATGTTGAG TTATCAATAA 240  
ATTGATATTG TATATGNCTC TAAA 264

SEQ ID NO:3688

LENGTH:262

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04344

SEQUENCE DESCRIPTION:

GATCCTCAGT GCAAATGTC TTGTGTANTT NTNTGTGAAT CCATGGGTCT GGCTAGAGGG 60  
CCCCAAAGCTT GTAAATATGG GGATAGTCTG GGTCAAGACCC ATCTNTCCCT TACCCATCTT 120  
GCTTCCAAGA CCATTGTAG TGAGCGAGTG GATGCTGTGC TACGTGTGAA ATCTGTCTTT 180  
GCGGGGCCTG TCTCACTGAT TCGNNTTTGG TATTNGTTG TAGCTTCCTT GGAAGTCAAA 240  
TAAATTTTC CCCCCACTCCA AA 262

SEQ ID NO:3689

LENGTH:256

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04345

01210

2153480

SEQUENCE DESCRIPTION:

GATCTCAAAT GTGAACAGTT TACTAATGCA CTACTGAAGT TTAAATCTGT GGCACAATCA 60  
ATGTAAGCAT GGGGTTGTT TCTGTAATT GATTCTAAT NTGAAATTAC TGAACAACTC 120  
CTATTCCCAT TTTNGCTAAN CTCATTCT GGTTTGGTA TATATCCATT CCAGCTTAAT 180  
GCCTCTAATT TTAATGCCAA CAAAATTGGT TGTAATCANA TNTTAAAATA ATAATAATTN 240  
GGCCCCCCCCT TTTAAA 256

SEQ ID NO:3690

LENGTH:251

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04346

SEQUENCE DESCRIPTION:

GATCTAAAAA GCTGAATAGC ATGTNAGTTA CTTGGTTCA ACTTGAGTTT NCTTTAATG 60  
TTAATAAGAT TGAAACTTTA GTATTTAGTG GGGATGGAA AGAGTTGCC 120  
TAATGAAGCC TGATTGATT ATGAAGCTGC TTAATCACTC TTCATGTGTT CAGAATTACT 180  
GTTTTNTTG TTTGTTTNC CTTTNGTCA CTGTGGTACA TTAAAAATTN NGGAAGATG 240  
CTTTACCTAA A 251

SEQ ID NO:3691

LENGTH:250

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04347

SEQUENCE DESCRIPTION:

GATCCCAGAC CTGTNGTCTC TCCCACCCCC TCCCAAAGC CACTGGAAGG AGCACATACT 60  
ACCTAGAAGT AAGANGNNGA GCCTCAGAAG AAAACAAAGT TCTATTTTAT TAATTCCTA 120  
TGTGTTGTGT TTGTAGTCTT GTCTTAGCTC TGGACGTGAA ATACTCGAT GATGATGATG 180  
ATGATGATGA TGATAATAAT AATAATAATA ACAACAACAA CAACAATAAT AAAGATGTGA 240  
AAACTCGAAA 250

SEQ ID NO:3692

LENGTH:248

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04348

SEQUENCE DESCRIPTION:

GATCTCAGAT AACTCAGTAC AGATAGCAAT TAGTCAGCTG ATTTGATTAC AATGGAGTAA 60  
CCGACAATAT ATTTATTTAT AAAGCACATA TTCATAATAA CGAGAAGAAT TCAGAAAACC 120  
ACTTAAGCAA GACCCTCTG AAATAAAANN TGNGCTTT TAAATAGTTT GTCCTAAGGT 180  
GTTTAAANCA TGTCAACCTT ATGTAAGGNNAANTTCCTG GTCCAANTAA NGTTGANGTT 240  
TAAGGAAA 248

SEQ ID NO:3693

LENGTH:248

01211

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04349

SEQUENCE DESCRIPTION:

GATCCTGGTT GGAAGGATGG GGACTCTCTC AAGGGGCTT GGAAGAGCTC TTCTAGCCCT 60  
TTATAAAAGG AGGGCAGCAG CTGAGACTGA TGAGAGGAGG GCAGCCTGCT CTGTTCTTC 120  
AGGGCCCCCC ACCCCCACCT CCCCTACCCCT AGCCCACCCCT AGGGCCTCTA CCCAGCGGGA 180  
GGGGTTGAAG ACCAGGCCTG GTTTTATTAG AATTCAATTGT GTAATAAAAG CCTTTTTAG 240  
TGGTGAAA 248

SEQ ID NO:3694

LENGTH:248

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04351

SEQUENCE DESCRIPTION:

GATCCTATTT TNATGAAATG TCCAGAACAG GCAAATCCAC AGAGACAGAA ACTAGACGAA 60  
TGGTTGCCTG AGGGTGGAGGG GAAACAGGGGA GTGACTGATG ATGGGTTTG TGTGGGGCA 120  
ATAGAATGTN CTAAAATTTG ATAGTAATGG TTATACAATCT GAATATAC TAAAAGCCAT 180  
TGTACACACG TTAAAAAGGG TGGATTGTAT GTGAATTCTA TCTCAATAAA GCTGTTCAAA 240  
AATTCAAA 248

SEQ ID NO:3695

LENGTH:245

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04352

SEQUENCE DESCRIPTION:

GATCCACTCC GCCATCGATG CATCCAGAC CCCCAGATGTC GTGTTCGCAA GCATCCTAGC 60  
AGCCTTCTCC AAAGCCACAT GTAAAGACTT GTTATGTTT ATCTAATGTT GGGTCCAAGA 120  
AGGAATTCT TTCCATCCCT GTNAGGCAAT GGGTGGGAAT NATAGGACAG GCAAAGAGAA 180  
GCTTCCTCAG GCTAGCAAAA ATATCAATTN ATGTATTGAT TAAAAAAGCA CTTGCTTGAT 240  
GTAAA 245

SEQ ID NO:3696

LENGTH:243

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04353

SEQUENCE DESCRIPTION:

GATCTCAAAA CCACTATTTT TATTATTCAT TATTTTCA GAGGCCTAA AATTCTGGAT 60  
AAGAGAATGG AGGAAAATAC TCANCGGTAC TTCATTATTT NATTCCCTT TATTAaaaaaa 120  
TTACTTCTAT GTTTNATTG TCTCTTGAGC CTTAGTTAAG AGTAGTGTAG AAATGCATGA 180  
NCTTCATCCT AATAAGGATA AANCTTAAGG AAAACCACAA TAAACCATGA AGGTGTACAC 240  
AAA 243

01212

SEQ ID NO:3697

LENGTH:241

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04354

## SEQUENCE DESCRIPTION:

GATCTNTCCA CGGTAGCACT TGNCCCTTTC GACGCTTAAC CTTCCGCTG TCGCCCCAGG 60  
 CCCTCCCTGA CTCCCTGTGG GGGTGGCCAT CCCTGGGCCCT CTCCACGCCT CCTGCCAGA 120  
 CGCTGCCGCT GCCGNTGCAC CACGGCGTTT TTTTACAACA TTCAACTTA GTATTTTAC 180  
 TATTATAATA TAATATGGAA CCTTCCCTCC AAATTNTTCA NGTAAAAGGT GGCTTTCAA 240  
 A 241

SEQ ID NO:3698

LENGTH:239

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04355

## SEQUENCE DESCRIPTION:

GATCAGCACT GCACTNTTAG CTGAGAGTGC GGGCAAGACA TAAACTGTCC AGAGTTNAA 60  
 GNTTCTNGGA AAGACCGGAG GGCTTCTCCC CACAGAAGGC GGAGAGAGCT GGGNCTCAGA 120  
 CATGGNTGTG CACCTTAATA AACCCCTGCTG TCTGCCTCCC TGACTCTGCT TCTNNGGAGC 180  
 ATGGTGAGCA GCCCTNGTGC TCANCAGCCA TACCTATGGG ACACACACTA CGNAAAGGN 239

SEQ ID NO:3699

LENGTH:236

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04356

## SEQUENCE DESCRIPTION:

GATCACAGGT GATTCACACG TACACACATA AACACACCCA CCAGTGCAGC CTGAAGTAAC 60  
 TCCCACAGAA ACCATCATCG TCTTGATACA TCGTATGTAC AATGCAATCA TTTCATACTT 120  
 TAAACTGGTC AAAAAGCTAA TTGTGATTTC TAGTCTTGCA AAGCTGTATG TAGTTAGATG 180  
 ATGTGACAAC CNCTAATATT TATCTAATAA ATATGTATTC AGATGAAACC TGTAAA 236

SEQ ID NO:3700

LENGTH:235

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04357

## SEQUENCE DESCRIPTION:

GATCCATCCT TTATCAGGAA GTCTGAAGCG ACTATAAAGG TTTTNANTT CAGATTTAAA 60  
 AACCAACTTA TAAAGCATTG CAACAAGGTT ACCTCTATT TCCCACAAAGC GTCTCGGGAT 120  
 TGTNTTGAC TTGTGCTGT CCAAGANCTT TTCCCCAAA GATGTGTATA GTTATTGGTT 180  
 AAAATGACTG TTTCTCTCT CTATGGAAAT AAAAAGGAAG AAAAAGGAAG GNAAA 235

2153480

SEQ ID NO:3701

LENGTH:232

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04358

SEQUENCE DESCRIPTION:

GATCCGTGTT CTCCATTAT TAATGCATTG TAGACCAATT TAACTGCTGT GTTTCAGGAA 60  
AATTCTTCT AGTTAACAA GCAAGCTAAA AGTTTTATT TTTATATTTA GTGCTTAATC 120  
TTTGCTCAT GTTATGTAAA ATTAGCCTGC AGATATTTC TCTCAATTCT GTAGACTCTC 180  
GCAAGATAAA CATTCAAACA GTGAAACAAA CANTAAAATA AATAAACCTA AA 232

SEQ ID NO:3702

LENGTH:231

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04359

SEQUENCE DESCRIPTION:

GATCCATCTG AACTATGAAG TGAGTACCTG GAGGAACCTC TACATTTAAG GCTTCAAAAG 60  
GTTACAGGCT TTTCGTGTGT GTGTGTGTGT GTGCGTTTG AGAAAAATGG 120  
AATTCAAACA CTGTNNTAG AATGTATGTT TACTTATATA GAATTAATGA ATNTATATAA 180  
TAATAATNAC TGTATATAAT TNATAAATAT AATAAAAGTCT CTTTATCCAA A 231

SEQ ID NO:3703

LENGTH:237

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04360

SEQUENCE DESCRIPTION:

GATCTGGAGT TGAGAGCCAT GGGTTGGAC ATGACTGGCA CAAACAGCTG TCATATGTT 60  
ATGGTCAGAT GTCATACATT CTCAGCTGTC TTGTTCCACC AGTATTACCC AGGAAAACAA 120  
AGAATGTGTT AAGGGATGCT CCCCCACCCCC ACATCTTAAG TCAGTGTGCC AAGTACTGAG 180  
ATGATTTAG GGACATTTA TTTAAATTA AATTTACAAT CTAATGGTAA ATTGAAA 237

SEQ ID NO:3704

LENGTH:231

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04361

SEQUENCE DESCRIPTION:

GATCATCAAC AAGATTCCCT TGTGCAAAAT ATTTGACTAT NCTGTATCTT TNATCCTG 60  
CTAAATTCTG GATTTAAAG CAGCATCTTC TGGTTAAC TTGTTGCTG TGAACAATTG 120  
TCGAAAAGAG TCTTCCAATT AATGCNNNN TTATATCTAG GCTACCTGTT GGTTAGATT 180  
AAGGCCCCGA GCTGTTACCA TTCACAATAA AAGCTTAAAC ACATTGTCAA A 231

01214

2153480

SEQ ID NO:3705

LENGTH:229

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04362

SEQUENCE DESCRIPTION:

GATCAAAATT GAACCATTGT ACAGTTGGN TTCTGTTGC TTCAAATAT GTAGAATTGT 60  
GGTTGATGAT TAATTGCGA GACTAACTT GAGAGTGTAA CANTTTGAN GAAAACATTG 120  
AATGTTTGC AAATGAAGGG GCTTCACCGA ATGTTACANT GNTACTAATA TAATTGGGCT 180  
TTNNNTATGC AAATNGTTAA CACCAGCTAT TAAAATATAT TTNNNGTAAA 229

SEQ ID NO:3706

LENGTH:228

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04363

SEQUENCE DESCRIPTION:

GATCGCTACC CACCTCCCTT CCATGGTTCC CACCCCTCAC GTTATTTCC CTTTCTGCAG 60  
CGGTTGCACG ACAGGTAGCT ACTGTGTATT ATGGACAAAT GAGAAATGAA TTCTTTCT 120  
GGCTGTCCAT CTATTTATT TCAAATAAGG AAAAGTGTAT TTGGATTTC TGAAATACA 180  
TCTAGTGATG NCATTTTC AATGTTTNAA AAAACCGTGT ACAGTAAA 228

SEQ ID NO:3707

LENGTH:228

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04364

SEQUENCE DESCRIPTION:

GATCCTCATC CAATTGGTGT TTTCAGAAG TNTCCAATA TTATGAATTG TGTTGTGG 60  
AGAAAAGCAA CCATGCATTT ACTGGTCAAT GCCTTCTTGT ATATGTAATT CAATACTTT 120  
ACTTTTAATA TCCTCACCTT ATCTAATCTT TGATTTTGT CATGTAATT ATTGCTTCAT 180  
TAAGGTTACT TTTGTTATA CAAAATAAAA GCTGATATCC AAGGCAA 228

SEQ ID NO:3708

LENGTH:226

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04365

SEQUENCE DESCRIPTION:

GATCTATGAA AATNTGTTT GACCAAACCT AGTATTAGGC AGGTACACAG ATAAGATTT 60  
CCATTCTNAACATTCTCACT GTAATGCACG ACATTTGANG CACCTGNATG TGCTATCAAT 120  
CAGGTGGGAA ATTTAGCATT ATATATTGGA AGCATTGAGA AACATTGGTC TNTCATTCT 180  
ATTNNNTTT NCCCCCTCTN TCCTCCTCCT GCCCCACANT ATATNN 226

SEQ ID NO:3709

01215

2153480

LENGTH:224

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04366

SEQUENCE DESCRIPTION:

GATCCTGAGA GCTTTAGAG GGTGTTGCCA GTTTAAGCT GAGATGGCCC ATTTGGAGCC 60  
TTACAGAACT AGACCAGAAC ACATTTGTGG ATAAATCTGA ACTCACTTCC TGTGTGTAAC 120  
TTCTAACTTC ACTGGTTCTT CCCATCTGAA TTGGCCACAT GCTTGCTGAA GAGACTTGTT 180  
TTCTTCTCT AAGACAGTGG TTTGTTTT TGGGTTTTT TAAA 224

SEQ ID NO:3710

LENGTH:223

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04368

SEQUENCE DESCRIPTION:

GATCTGGGCA GAATCCGCCA AGCGGCTGGG CCCAGGCTGT GGCGATGATGN ACggAGNAAN 60  
GAAGCACCTG GACTCTAGG GATCCCTCCT TAGTCGCTGC ATGCAGAAATT CTATGACACT 120  
CTAATNATGA TTGCTAATAG CTTATGTAAA TATTTNNNTT AACAAATTGG NCCTNCACTC 180  
CTTNAAAAAC ACAAGGATTA TAAAATGGGT GCCNGCATTN NTN 223

SEQ ID NO:3711

LENGTH:221

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04369

SEQUENCE DESCRIPTION:

GATCGTATTG NTNATAAACT ATTACCAAGTA CAGTAGCTAG TAGATATNN GTGACTGCCT 60  
CATTGTTAT CTTGCTGCTT TGGTCCCTAT GGCTCTAGTA TGAACATTCT CGTGTCTTCT 120  
GTGGAAATGA TTTCTGTGTT ATAGITNCAN CTTNGGTAGA GGTGGGGATG ATTGTATTTT 180  
GTTTTAGTTG ACATCATTCT CAACTNTTAG AAATACTGTT N 221

SEQ ID NO:3712

LENGTH:219

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04370

SEQUENCE DESCRIPTION:

GATCAGTTG CGAGTTTGA TGAGNTTGT AAGGTTNTN TTTTACAAAC TATGAATCAG 60  
CAAATNTTA AGATTGTACC ACATAGCAAA CATACTAGCTG TTGAAAATA ATGTATATAA 120  
AATGCATATA ATAAATATTA AATNGTGTAC CTGTATGTTA CTGTTGGCTA CATCATTG 180  
TGTTGAATAA TAAAGTCAA TACNNNCCTT CTCCATAAA 219

SEQ ID NO:3713

LENGTH:214

01216

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04371

SEQUENCE DESCRIPTION:

GATCATTCTG TATATACATA TTTAAATTA TGCAAGCAAA CTAGGAGGAG AATGTNCAAT 60  
TTTAAGGGAT ACCTAATTC CNTTCGGTTA GGGGATATTT TCCANCCTCT TGCTTATAC 120  
TCTGATATGG GGTGTNTTA TGANCTTTT AATGTTATT ANTCATGCAG ATTTCCAATC 180  
ANTGTATTGC NCATTTCTG ACAAAANGGG NAAN 214

SEQ ID NO:3714

LENGTH:215

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04372

SEQUENCE DESCRIPTION:

GATCCAAAAN ATAAAACTTG AAGCTATTCT GGAACTAACA TGGAAAATG AAATGGCTAT 60  
TGTTTAAAAA AATGATAGAA ATACATTGTT GATGGGATAT GAGTTAAC 120  
AAACCTGTAAT TTGATGACGG CATGGATAAT ATCTTCATGT TTCTGACNAG TAATCTGTAT 180  
GTGGGGGGAG GGGATAATAA ATATTCTAA CAAA 215

SEQ ID NO:3715

LENGTH:335

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04373

SEQUENCE DESCRIPTION:

GATCAAAAGT GAACACCCCTG GCCTATCCAT TGGGGATACT GCAAAGAAAT TGGGTGAAAT 60  
GTGGTCTGAG CAGTCAGCCA AAGATAAACCA ACCATATGAA CAGAAAGCAG CTAAGCTAAA 120  
GGAGAAATAT GAAAAGGATA TTGCTGCATA TCGTGCCAAAG GGCAAAANTG AAGCAGGAAA 180  
GAAGGGCCCT GGCAGGCCAA CAGGCTCAAN GNAGAAGNAC GANCCAGNNNG ATGAGGAGGA 240  
GGAGGAGGAA GANGNAGATG AAGATGAGGA GGAAGAGGNT GAAGATGAAG AATAATTGGC 300  
TATCCTTAA ATGATGCGTG TGGAAATGTGT GTACN 335

SEQ ID NO:3716

LENGTH:211

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04374

SEQUENCE DESCRIPTION:

GATCAAATGT GCTGCAGCTT TTGCAGAAAA CAACTCAGAA ACACAAAACC CCCCAACAGC 60  
TCAATTATTA TTTTTCAAT GTTTCCCTAC AAGAGCCAAG TAGCACCATG TACAGAAGAC 120  
GCCTTTTTT TTGGAATATT GAAATCGTTC TGATGTAAA ATATGGATA ATGACCTGTT 180  
TATATTAAAA TTCTGATTAA ATTATCTGAA A 211

SEQ ID NO:3717

01217

LENGTH:390

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04375

## SEQUENCE DESCRIPTION:

GATCAAGAAC TCTACCATCC CTTGGGTCTT TGTGTATAAA CAATGTTAAA TACCAAGGTAG 60  
 ACTCAGTCCTT TAAGATATTA GACAGTTTT TTAGTCCATG GGNTNNNAA TATAAACATT 120  
 AACTTTCTTA TAAGANTATT TTGGCTTGT ATCTATAGC CTCAAATTGG TATTTATTAT 180  
 GGNTTCACTA GACAAACAGC TGTTCCCTTA TTGTNTTTN NCTTAGTGT TTCTGATTG 240  
 CTATCAGTAG CTGTTTTAA AGCCGNCCAA GGNAAATANT TATTTGCAGT TTTTGAAAGT 300  
 CACTTTTGA GCCCTCATNC AAGCTCTCAT TGTGGNTGGG GAGGGATAACC NTTTTGGTT 360  
 GTTAAAAGGC CTATNATTGG TTAAAGGGCN 390

SEQ ID NO:3718

LENGTH:235

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04377

## SEQUENCE DESCRIPTION:

GATCTTAGAG CTGAGGAATT GGCTCTCCAA TCCGAACAGG TGTTATAATC CTTTCTNAAT 60  
 AGGTTGTGCT GTGGACCCAA TGTNAGGGCT GTNCTGGTGT AAATGGTGAC ATATTGAGCT 120  
 GGGGGGATGC TTTCGGGTG GGGGGACTGG TTCCATTCCA TCAAAAGGCC CTCTTGAGAG 180  
 TCTATCCNNGG GNCCCATTGG TTNAATTAA CAGGCCAGNA AAGANGTTG NTNNN 235

SEQ ID NO:3719

LENGTH:209

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04378

## SEQUENCE DESCRIPTION:

GATCTCCTGA GCTCAGGCAA TCCGCCACC TCAGCTGTC AAAGTGCTAN GATTACAGGT 60  
 GTGAGCCACC ATGGGTGGCA TCTTAATAT AGATTATAA GGCCCCNNTG TTATATATTT 120  
 NNAAAAATTC AAATTAACAC TANATCCCCA AATGTCCCNT TTATTAATGA AGTATTTGT 180  
 CANATGGATG TTTAAAGCT GTGTATGTN 209

SEQ ID NO:3720

LENGTH:209

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04379

## SEQUENCE DESCRIPTION:

GATCTAGGAT TACTCTGGAC CTCATTCGGG TGTTATGAGT ATCCCACGAA GGCCAGACGC 60  
 TGATTTNATT TNCTCATTTC CACAGATTGA CAAGGATAAG TCAGNNGTT GTAAACTCTA 120  
 GGTAGCAGAT GAGAAATAAT TCACCTAATA TCAGAAATAT TTNCCAAACA CTTTCCTNA 180  
 TTTTCCTTC TGANTAAATA GANANCCNN 209

2153480

SEQ ID NO:3721

LENGTH:208

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04380

SEQUENCE DESCRIPTION:

GATCCAAGGA ACGTTGGGG TTTCTAGGT GGGCCACATC CAATCAGTGG AAGGTCTTAA 60  
GAGCAAAANC TGAGGTTCT CAGAGAAGAA GGAAATGTT TAAGACTTCA GCATCAATT 120  
CTGCCTGAGT TTCTAGCCTG CTGGCCTGCT CTACAAATT CAAGCTTGCT AGCCCTCAC 180  
NTCACATGAA TAAATTCCCTT AAAATAAA 208

SEQ ID NO:3722

LENGTH:208

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04381

SEQUENCE DESCRIPTION:

GATCCTTCC CCATGGACAG TGACAGAGCA ACTGGGCCGC AATGGCATAG GCAGAAAGAAA 60  
ATNTAACATCAC TCTGGGGGTG ANTGGTGGTT AAAACGACTC ATGTAATTAT TTGGATTGTA 120  
ATTCNTTAC ACATATTNT TTGCTTAACC CAGCATGTNA GATATATNAT NTAATCTAAT 180  
AAAAGATACA AACTTATGGG CACACAAA 208

SEQ ID NO:3723

LENGTH:207

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04382

SEQUENCE DESCRIPTION:

GATCACCTG GAGCTGTGGC TTCCCCGAGC AGCTGAGAGT GAAAGGAGGC AGTCCTTTA 60  
CTGTGAGTC TCACGGCAGC GTGCTCACGC CCCACACAGG GGCTGCCTTC ACTCGGCTTC 120  
AGCAGCNGTT GACTTTAAA TCATAAAAAG CCGCTCTATA TACAGTTAC TCTGTTGCTA 180  
GAAGGCAGTG GAACATAGGT ATTAAA 207

SEQ ID NO:3724

LENGTH:207

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04383

SEQUENCE DESCRIPTION:

GATCCACGTA CAGTTGGAT TTTCTTCTA GCCTTCATGT GTGGCCAAG CATCTATT 60  
AGACTGTCAAT GGTTGGCATT GTTCTCTGAG GTTCTGTCTT CCCTTCGTGT TTCTATGAGC 120  
TTAATTGTG ATGGTTCTTG TTCTGTTAAT GCCACTAGGG ACTATGTATT CCTGATTCCA 180  
CCATGACAGC TACAGTAAAA CAGTAAA 207

01219

2153480

SEQ ID NO:3725

LENGTH:204

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04384

SEQUENCE DESCRIPTION:

GATCAAGCAG GCACTTCAAG CCTCAATAGG ACCAAGGTGC TGGGGTGTTC CCCTCCCAAC 60  
CTAGTGTCA AGCATGGTT CCTGGCGGCC AGGNCTTGCC TCCNTGGACT ANCTGGGGGG 120  
TTCCGGGTCT CAAGAAGACA AGGGTGCTGG NCCTCCCTAA GCCAAGGAGA GGANTAAAGA 180  
CAAAAAGCTN AAAAAAAAAG GAAA 204

SEQ ID NO:3726

LENGTH:202

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04385

SEQUENCE DESCRIPTION:

GATCTCGAAC TGTACCAAAA TACATGGAGA CTAACAAACA GAACCACATG GAACTTTCAA 60  
ACTGAAAAAA AAATTGTCA CAAAAACTTT GTTGTCTAG TTAAGTTGAT TGTAGATGGT 120  
AATTGAATAT ACTCCTTGA AAATATTCA TCAAGTATGT TTCTGCTCA TTGTGATACA 180  
TTAAAAAAAA ANTATGGCA AA 202

SEQ ID NO:3727

LENGTH:219

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04386

SEQUENCE DESCRIPTION:

GATCCAGAAG GCTTACGAGT ATTTTATTAT CTTGTCCAGG ACCTGAAGTG TTTGGTCTTC 60  
AGTCTTATTG GATTACACTT CAAGATTAAA CCAATCTAGA CTGAATATTG GTGTGGACAT 120  
GGGGGGTGGG TGGGAGTAGA AAATTTGTG TATATCAGGG CAGTATTTT TTATGAACCA 180  
TAAATGATTG TCTTAATAA ATATGTGATA AAATCCAAA 219

SEQ ID NO:3728

LENGTH:200

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04387

SEQUENCE DESCRIPTION:

GATCATATT AGAGGATATA ACAATTAGAA ATCTAGAAAA TAATTATCAC TTNATAAAA 60  
TNTTNAGTCA ACTGTACAAA TAATTACATA AAACATCAAT TAATNATGCT TAAAATCAC 120  
TAATNTTCAT AATATATAAT CACTATTGT AATCAAAAGT TTAATTTAT NTNAAAAAAT 180  
AAAAAAATGCT TACTTGAAA 200

SEQ ID NO:3729

01220

LENGTH:198

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04388

## SEQUENCE DESCRIPTION:

GATCAGCCGA ACTCTAGGGA CTTGGTGTG CTTGGAAGGC ATCCATACCT GCATTTGCA 60  
 TTCTTCGTAT GTAATCATAT TGCAAAGAC AACTATTTC ATCATTATT GTAAATAACA 120  
 CTTTTCCCCA GACCTACCAT AAAGTTCTG TGATGTATTG TCTTCCAGTT GCAATAAAA 180  
 TTACTGAGTT GCATCAAA

198

SEQ ID NO:3730

LENGTH:197

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04389

## SEQUENCE DESCRIPTION:

GATCTAAGAT TAATTCTCA ACTGTTTG ACTCAACAAA GACATACCTC TGAGTTGGCA 60  
 ACCAGCAGGG TGGATAACGG GCCAGTGGTG ATAAAATCAA AGAATAGGTA ATGAAACAAT 120  
 CATCCAGTTA ACAATCAGCA AGGTTCTTCA GAGCCTAATT AATGTTTAAT TCTAAATAAA 180  
 TTGCAACAAT TAAGAAA

197

SEQ ID NO:3731

LENGTH:197

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04390

## SEQUENCE DESCRIPTION:

GATCCAAAAG TTTAAATTAG TGCATACATC ATGTCATTG ACCTCCTGTT CCTAGGAAC 60  
 CTCCATTCCC AAGCATTGCC AGTGTTCAGG AGATAATCTT AGCTGTTGTC TTGTGCTGTG 120  
 GAAATGGAAG AAACCATCTT CACAGACTGT AGGAGAATTC AACATATAAT TTCTTAATAA 180  
 ATACTGTTTC TTTTAAA

197

SEQ ID NO:3732

LENGTH:195

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04391

## SEQUENCE DESCRIPTION:

GATCTAAGGG AGTCCACTAT CTGTGCAATT GTATTGGNT TTTTTTGCA CTGTTCAAT 60  
 GCTGGTAATT GAAACCATT TAATATATTG GGTTGTATTG ACTTTATATG TCCTTCCAAA 120  
 AATNTTGTG TGACAAACC ATGNNNNGA ATGTTGGCTT CCAAGTTTT AAATAAGAAA 180  
 CTTTTGTAT TAAAA

195

SEQ ID NO:3733

LENGTH:195

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04392

SEQUENCE DESCRIPTION:

GATCCACGGA GCAGAGGTCA TCTGTCCCCA GCTTGGCCCA CTGAGGCCAG CATGGNTGGG 60  
CCCAGGATGC TTGTCTCTCA GCTCCCATCC TGTGTACTTC CACATTGGTT TAACCAGAGG 120  
AAAACCGAAA TCTACAATTG TNATAAACAC ATTTAAATGT GCGTAGAATC AGCCATACAA 180  
ATTGTGAAAC ATAAA 195

SEQ ID NO:3734

LENGTH:195

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04393

SEQUENCE DESCRIPTION:

GATCAACTCC CCCAAGGGCCC GAAAGGTGCT GCATACACG TACCANAGCC AGGAGCGTGG 60  
CACACACAGC CTGGACATCA AGTGGTGAAG TNAGGCCAGG GNCTTCCAGC TGCTCTGGG 120  
GCCAGAGCCA AGAGCCTCTN AGTAGAGGGA GGGGCTGCC TGAGTGGAGT ATTAAAGACA 180  
CTTAAGAAAA CCAA 195

SEQ ID NO:3735

LENGTH:193

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04394

SEQUENCE DESCRIPTION:

GATCCTGTGC CCTAGGAGCA CCTAGGAAGA CTTGCTCCAT CTCCGCCGC ATATCTGGGG 60  
CACCAAGAGA GACAGAGTCG TGAGCCAGGC TCGCCTCATT CCTCGTCTTG GGAGAACCGG 120  
ACCAACTTCC CCAAAAGGCC TTGCCGTGCA GAATTGGCCT GGTTTAATAA AGAACAGACC 180  
TGNCCCAAGN AAA 193

SEQ ID NO:3736

LENGTH:190

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04395

SEQUENCE DESCRIPTION:

GATCTGGCCC TCCCCAGAAC AATCTGGATT TCACGGAGAC AGCAACCAGA AGTTAAACCA 60  
TGTGACTAAA AATGCATCTG GCTACTTTT CATGTATGTA TGAGACAGAA ACTAATCCTT 120  
ACTATCCTAT TAGGATACCA CTTTCATTG CAAAGTTGT GTCAATAAAG TCATTAATTT 180  
TAAACATAAA 190

SEQ ID NO:3737

LENGTH:190

TYPE:nucleic acid

01222

2153480

TOPOLOGY: linear

CLONE:HUMGS04396

SEQUENCE DESCRIPTION:

GATCATAAGT AGTGGAGGAT TTAAAACCA GCTGGCTGGC TCTTAAGGCC TATGCTCTTA 60  
ATTNACCATG TNGAATTAAT TTACCATATT GAATTACACT TATGTNCACC AAGTNAGGCA 120  
TTTNGGCAGC CATTGTTAC GTTTANTTT TGGAATAATT TAGAAAAGTT ACCAGAGTAA 180  
TATGAAAGCN 190

SEQ ID NO:3738

LENGTH:187

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04397

SEQUENCE DESCRIPTION:

GATCCTCCGC ATCCCGTGGC AGGAAGAAGA TGTGGAGATG AGTGAGGACG CCTACACGGT 60  
GCTGACCCGC ATCGGGCTGG AGACGTCACT GCGCTACGCA NNNNNNGCTCA TCACAGCTGC 120  
CAGCTTGGTG TGCCGAAAC GCAAGGGTAC AGAAGTGCAG GTGGATGACA TCAAGCGGGT 180  
CTNNNNNN 187

SEQ ID NO:3739

LENGTH:187

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04398

SEQUENCE DESCRIPTION:

GATCTGGCCC TAAACTGAA ATACCTCCTG CTCCCTTGGG GACTGGNCTT TGCNAAGAGC 60  
ACCTGGGGAG GAGACTGGTG CTAACTAAGC CAGTAAGTAA GTCCACTCTT TGGNTGCAGC 120  
TGGTGCAAGG TCTACCCATA CCTTTTATT TNCAGTGTAA AATAAAANTC CAGTGNGCAA 180  
AGACAAA 187

SEQ ID NO:3740

LENGTH:186

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04399

SEQUENCE DESCRIPTION:

GATCAAGTTC TCGGNCTGAN GAGGCTGCCA AAAGTCAAAA GNGGGGCCTG GGAAGGCAAG 60  
CTCATTCCCTC ACAACGGCCT TTCCAGGCC NGTTTTCCC TTCCGGCAGC CTCTTGGCCT 120  
CTAATTTGTT TATCTNTNGT GTATAAATCC CAAAATATGG AATTTGGAA TATTTCCACC 180  
ATTAAA 186

SEQ ID NO:3741

LENGTH:185

TYPE:nucleic acid

TOPOLOGY: linear

01223

2153480

CLONE:HUMGS04400

SEQUENCE DESCRIPTION:

GATCTGCCCTT CCTGCTGAAA CTTGTTCCAC CTCAGTCCCC TCATCTGTCA CACGCATGTG 60  
GGGTGGAGTA GGGAGATGCG GGGAGCAGGG TGGGCAGGAA TACTGTTATC TATGTNACGG 120  
GGCAGTCGTG AGGCTGAGAT GAGAATGCGG ATTAAAATGC CTGGCGTGCT CACCGTAACA 180  
CCAAA 185

SEQ ID NO:3742

LENGTH:182

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04401

SEQUENCE DESCRIPTION:

GATCCCACATCT NTACAANAAA CTTAAAAATT AGCCAGGCAT GATGGCACAT TCCTGTAGTC 60  
CTAGCTACTC AGGAGGCTAA GGTAGGAGGA TTGCCTGAGC CCAGGAGTTC AAGGCTGCAG 120  
TGAGCTAAGA ACGTGCCAGT ACACTCCANC NNGAGCCACA AAGTGAGACC CTGTCTCGCA 180  
AA 182

SEQ ID NO:3743

LENGTH:180

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04402

SEQUENCE DESCRIPTION:

GATCAAAGTG GTAAAGACAA TGAAAATT AACATTTAA TACTGATGTT GTACACTGTT 60  
TNTACTTAAC ATTTGGGAA GTAATGCCT CTGACTTCAA CTCAGANAA CACTTTTG 120  
TTGCTAATGT AATCGGTTT NGTAATGGCG TCAGAAATAA AAGGATGCTT ATNATTCAAA 180

SEQ ID NO:3744

LENGTH:179

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04403

SEQUENCE DESCRIPTION:

GATCTNCGGA ATGATGAGCA CACAAGGCAG GAGCTAGCCA AGATGAAGCA GGNCCGGTG 60  
AACCTGAAGA AGGCAGAGAT ATGGCAAACA GGATTNCGC TTTGGNNAC ATGGAGTGT 120  
CAGCAAAGAC CAAAGATGGA GTGAGAGAGG TTTTNAAAT GGCTACGNGA NCTGCTCN 179

SEQ ID NO:3745

LENGTH:178

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04404

SEQUENCE DESCRIPTION:

GATCTGAGTG CCTCAAGATG GTTTCAAAAA AAATTTTTT AAAGAAAATA ATTGTATACG 60

01224

2153480

TGTCAACACA GCTGGCTGGA TGATTGGGAC TTTAAAACGA CCCTCTTCA GGTGGATTCA 120  
GAGACCTGTC CTGTATATAA CAGCACTGTA GCAATAAACG TGACATTAA TAACGAAA 178

SEQ ID NO:3746

LENGTH:332

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04405

SEQUENCE DESCRIPTION:

GATCCGAGTT CCTCACCGCG GGCCGGGATG TGACCACCT NTTCAGAGGT TGGACCCCAG 60  
GCTTCAAGCA CCGAGTGAGG GGTCTGTTGG GCCCCCTGGG AGAGTCTCTG GTGTGAAGTG 120  
GCTTAGGTCT GGACTGGTCA GCTGTGGCAC CAGCCGGTCC TGCCCACGCT TCAGGATGGC 180  
CGGGGGCTGC CCCTGTGGGA GAGTTGCCAA GACTCGGCAG TACCAAGGAT GGAAGCCAGA 240  
GGCTGTGGCG AGGGAGAGCC AAGCATATTC CCAGCACCAG GGCCACTGCT GGCACGTCGT 300  
AGACATCCAA TAAATATTTT TGGAAGGAGA AA 332

SEQ ID NO:3747

LENGTH:177

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04406

SEQUENCE DESCRIPTION:

GATCTNNATA CTGTGAATAG CAGAACATGAC AGATGAAGAA TATTAATATN AGGGCGTCC 60  
ACTCCAAAAC ATATCACCAAG AGTGACAAC TCAAGCCCTCA GCCTCTGCAA TCCATATATA 120  
TNCTGGTCTT GGGAGTCCAT AGAATACTGT TTCTTCTAA TAAAGGTTTC AAACAAA 177

SEQ ID NO:3748

LENGTH:186

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04407

SEQUENCE DESCRIPTION:

GATCAATAAT AGTACCTTTN ATTATACATT TATTATTGTN TCTCTCTCTG ATGTACTGTG 60  
GATTGTACAT TTAACCTTG AATGGCTTTG TAATAATCAG TCTTAAGAAA ATNTGACAA 120  
GCTCTGGTTG CTTATTTTA GAAAATAAGG ACATTTAATA ATAATAAAAA AAAAGGGATT 180  
AATAAA 186

SEQ ID NO:3749

LENGTH:175

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04408

SEQUENCE DESCRIPTION:

GATCCCCAGT GGATGCCTGA AACCGCAGAT AGTACTGAAC CTTATATATA CTGTTGTTT 60  
TCCTATGCAT ACATATCCCT ATGATAAAAGT TTATGAATT GGCACTTAAC AGCAGAACTA 120

01225

2153480

ATAAGATGAA AGAGTTGTAA CAATATACTC TAATAAAAAGT NATTTAAAAT GTAAA 175

SEQ ID NO:3750

LENGTH: 172

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04409

SEQUENCE DESCRIPTION:

GATCAACAAT GAGCAGAAC ATCATCAGTC CTTCCCAAGG ACCATGGCGT TTAATGTCTT 60  
GGGCACCCCT TGGAAATCAC AGAAAGTCAG CNGTACTGGC CGTGTGGAAC TTNCATCCCA 120  
AGACCTACTT TNCAACTGAG TAAGAAGGTC ATTGTGCCCN CTGCATTNNN NN 172

SEQ ID NO:3751

LENGTH: 107

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04410

SEQUENCE DESCRIPTION:

GATCAAAAAA TGTTTATNCT GAATTCTNTA ATTTAAAAAA NTCATACCTA TNAGGTGTGC 60  
TACAGGAATT CAGATACAAT AAGTTGCATA TAAAACCCGA CCTCANN 107

SEQ ID NO:3752

LENGTH: 169

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04411

SEQUENCE DESCRIPTION:

GATCTGACCA ACAAGGCCAC AGGAAAATTA ATAGCACAAG GAAGACACAC AAAACACCTG 60  
GGAAACTGAG AGAACAGCAG AATGACCTAA AGAAACCCAA CAATGAATAT CAAGTATAGA 120  
TTTGAECTAA ACAATTGTAA TTTTGAAAT AAACTAGCAA AACCGAGAAA 169

SEQ ID NO:3753

LENGTH: 167

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04412

SEQUENCE DESCRIPTION:

GATCTNCTTG GCCACCGAGGA CGTCCAAGGA CCAGAGCCTG TGTCTATGTCC TNGAACAGGT 60  
NTGCGGCGTC CTCAAGCAGG GGAGCTGAGC CTTCCANAGG CAGGGTGGGC TCCAGTTGTC 120  
TTGAGGGTCC GGATGGGCTC AGGTAAATAAA GAAACGGAAG CAGCAAA 167

SEQ ID NO:3754

LENGTH: 168

TYPE:nucleic acid

TOPOLOGY:linear

01226

CLONE:HUMGS04414

## SEQUENCE DESCRIPTION:

GATCTGGGCT GTGGGGCCCT TGGGCCACGC TCTTGAGGAA GCCCAGGCTC GGAGGACCC 60  
 GGAAAACAGA CGGGTCTGAG ACTGAAATTG TTTTACCAAC TCCCANGTG GACTTCATG 120  
 TGTGTATTG TGTAATGAG TAAACATTT TATTCTTT TAGGTAAA 168

SEQ ID NO:3755

LENGTH:162

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04415

## SEQUENCE DESCRIPTION:

GATCTATGAT TTATNATGTC TTAATAGACC CAAATTGTT CTTAATTAC AAGAGTGGCA 60  
 GTCTCTGAAG TCATTGTGA GCTGTATGA CTTTGTATT TAGCAATGTT GCATGCTCAC 120  
 ATAATTGAAA ATAAAAAGTA ACACATTTT CTGAAATGTA AA 162

SEQ ID NO:3756

LENGTH:161

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04416

## SEQUENCE DESCRIPTION:

GATCAAACA TAATTGTTT AATTCTACAG CTGTAGGAGC TTTGTATTG TGAACTTTCA 60  
 TCTGGAAAAG TTTCACAGTG ACATTTTAA AAGAGAATTG TTTTATCTGC CGAATTCTAC 120  
 CAGTGTAAACC TTTTNNTAA ATAAACAATA GTTTNTCAA A 161

SEQ ID NO:3757

LENGTH:160

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04417

## SEQUENCE DESCRIPTION:

GATCTCAAGA AGCCCCACAT CTTCCTAAGG GGCCCCATGG CCTNNNTTGG GNCGAGGGTA 60  
 GGTCTGGGG CACTGTGGC CGCTCTGCCTG CTGATGTGGG CTCTAGGCCA GCTTGTGTC 120  
 ACGTACGTGG TGTGAAATAA AGCCAAGCA CTNGNTGAAA 160

SEQ ID NO:3758

LENGTH:160

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04418

## SEQUENCE DESCRIPTION:

GATCCTGGGT GACTTGGGT GCACAGGGTG ACCGAGCATT TCTGCCCTG TGAATGTGGC 60  
 ACTAACACTG TGCAGTGTCT CCACAAANA AGGTTCCAC TGAGTTCTT CTCATGTTAC 120  
 TGGGTTGTA AATGAATAA CACATTTAA CTACTCTAAA 160

2153480

SEQ ID NO:3759

LENGTH:158

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04419

SEQUENCE DESCRIPTION:

GATCAATAAG AAGANCTAG TCTAGAGACA ATGATGCTAG TTTGCATATG TTTTCCTATG 60  
CAATAGTTGT TTTCCAGTN ATNCAAAGCA GCTTTCTATA TGTAGAGATG CAAATNATTA 120  
AGTTGTTNCC AATACAATAA ATAAAAGCAT CNGTTNTN 158

SEQ ID NO:3760

LENGTH:158

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04420

SEQUENCE DESCRIPTION:

GATCAGATT GTAAATTNCC TGTATTAAAT GCCTAGAACT CTACAGTCAA CAGATGGCGC 60  
TCTAGTTCCA ATTGTNACAG AAGTNCTTG CCCATCCGCA AGCAAAGCGT TGTTTCATC 120  
AGTAAAAAGA GAATAANCAC TGTGCTTAA CTTTTAAA 158

SEQ ID NO:3761

LENGTH:290

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04421

SEQUENCE DESCRIPTION:

GATCTGTATG GTACTATAAA ATACTTATTT NATAATTCTG TAACCGTATG GCAGTGTAT 60  
GCCAAAAATG TATAAAGAGC AATAGTTTT GTTGCTTACT GCTGTATTT AAAATATTGT 120  
TTCTAAAATA ATAGNGTTAG AGTCCCTTT GAGTAATTAT TTTAAGGAC TATTGCCAAA 180  
TATACATCCT GTAAAACCTA ATAAAAGCCA CTCCATCTT NGGTAACCAT TTTAGCATT 240  
GTGCTTGGNG TACATNNNTGG GTGGTTTTG CNCNTTAAN NANNTANN 290

SEQ ID NO:3762

LENGTH:158

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04422

SEQUENCE DESCRIPTION:

GATCCCACCC TCTNTCCAC CTGGGCNACT GACGCTCTGG CCTCTNTGGN AATNACACTG 60  
GGCTGACCTG GCATTGGAG AGGGAGGGAG GAAGGAAGGG AGGGAGGGGC TGGAAGATA 120  
TGAAGGATTC CTTTTNAAA GGTTTTTTT ATTGTAAA 158

SEQ ID NO:3763

LENGTH:157

01228

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04423

SEQUENCE DESCRIPTION:

GATCCAAGTC CCCTGCCTGG TCCCCCACAA GGNCTCCCAT CCAGGCCCGC TCTGCCCTGC 60  
CCCTTGTNAT GGACCATGGT CGTGAGGAAG GGCTCATGCC CCTTATTAT GGGAACATT 120  
TCATTCTAAC AGAATAAACC GAGAAGGAAA CCAGAAA 157

SEQ ID NO:3764

LENGTH:157

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04424

SEQUENCE DESCRIPTION:

GATCATTTN CATCTGTNCA TAGCGTTCT NCAGAAGGAA CAGTAGTCTC AAATCTTCC 60  
TCATAATGAT AACAAAATGC TCTTGCATGA TTTNTAACAA ATATATTTAA NCAGGAAGTT 120  
GTCACTGATA TACTTTATTA AAAGGATTT AATCAAA 157

SEQ ID NO:3765

LENGTH:161

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04425

SEQUENCE DESCRIPTION:

GATCGTGTGT TGCCATTNG TCTGGCTGTG GCCCCTCCTT CTCCCTCCA GACCCTTAC 60  
CTTTCCAAA CCCTTCGGTA TTGTNCAAAG AACCCCCCTC CCCAAGGAAG AACAAATATN 120  
ATTCTCTCT CCCAAATAAA CTCCCTAACCC ACCTAGTCAA A 161

SEQ ID NO:3766

LENGTH:156

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04426

SEQUENCE DESCRIPTION:

GATCTTGAGG TTGTTTGATG CTTAAATT TTNAATTATA TTATTTNTA GGTGTTTATT 60  
GGTACATTGC AGTTTTTT TTNAATTAA AAAATTCTG TAAAACTTG TNTTCAAGTA 120  
ATCTGACAGC ATTAAATATT GCATTTAAAA ATTAAA 156

SEQ ID NO:3767

LENGTH:155

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04427

SEQUENCE DESCRIPTION:

GATCCGCAAG AACAAAGTACC GCCCGACCTG CGCNGGCAGC CATCCGCAGG CCAGCGCATC 60

01229

2153480

CTGCGACAGA AGCCTGTAAT GGTAAGAGAA GCGACCCGCC CACCAAGAGT CCTGAGCCCC 120  
TGCCCAGAGA ATAAAGCAGC TGGCTTCTA CCAAA 155

SEQ ID NO:3768

LENGTH:155

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04428

SEQUENCE DESCRIPTION:

GATCCCAAAA CATCATNAGG CATTNTNAAG TTGGTCACGT CGCAAGTCCG ATATCACAAC 60  
TTAATTGTAA AAGGAGGGAA TCTGGTTTG TNACTTGGCA GTGGTTTTT CTCACCCCTTC 120  
CTTTTAACA ATAAAATCCC ATTTGGGTCT TGAAA 155.

SEQ ID NO:3769

LENGTH:155

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04429

SEQUENCE DESCRIPTION:

GATCTATTG ATAATTTNT GGGTTTTTG AAGAATTAAT GAGCATGTAC ATAGAAATAG 60  
TGACTGCTTG ANTACTGTAT TTNCCTGCAC TCTTCAGTA CATCAAGATT CCTGTATATN 120  
TNAGNGTATA ATAAAACACA GATGTGAGTT GTAAA 155

SEQ ID NO:3770

LENGTH:153

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04430

SEQUENCE DESCRIPTION:

GATCGGCACA AGATGCTCAG CTAGATGGGC TGGTGTGGTT GGGTCAAGNN CCCAACACCA 60  
TGGCTGCCAG CTTCCAGGCT GGACAAAGCA GGGGGCTACT TCTCCCTTCC CTCGGTTCCA 120  
GTCTTCCCTT TAAAAGCCTG TGGCATTTTT AAA 153

SEQ ID NO:3771

LENGTH:153

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04431

SEQUENCE DESCRIPTION:

GATCTGAAGT GTGAGTAGAA TGTATTCAAG TGTAAACAT GTAGTTAGA TATTCAAAG 60  
TATGCATGTA GAGTTAAAG AATATGTTAA AANTNATTAA TTTAATATT TTGTTGGAA 120  
AAGCATGTTA TAATATAATG TTTCACTAT AAA 153

SEQ ID NO:3772

LENGTH:152

01230

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04432

SEQUENCE DESCRIPTION:

GATCTGGNAC TCCTTGAGT AAGCTGTTT CTGCTCAGCC ACTGGGCTCT TTCACTTTT 60  
TAGTTCTAA AAATTATTT TTAAGTTCTA AAATAAAAATA AAAATAAGTT CTTAAAATTT 120  
ATTTTTTCC NGAATAAAATT GTATTTGGTA AA 152

SEQ ID NO:3773

LENGTH:151

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04433

SEQUENCE DESCRIPTION:

GATCGCAAAT CACAGCTCAG ACAGCCAGCT CTTAAGTGAG ACCTGAGTGC CAGAGAGGG 60  
TGGATACAAG GCCAACAGTT ACTAAATGAA TGAAAATTGT GATTCCGATG AAGCCTGCCA 120  
GAGAAATAAA GCATTTTTA AAAGATGGAA A 151

SEQ ID NO:3774

LENGTH:151

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04434

SEQUENCE DESCRIPTION:

GATCTAGCCA TAAAACTAGT AATCTTGAAT TCCTCTTGAG CTGGATGGTG ATTAGCCATT 60  
GTGAAAACAG ATTATATGGA AATTGTGCAT ATTGCTAAAT TTTAAAACAT GGATTATCA 120  
ACTGATAATA AAATATATCT TACAAGATAA A 151

SEQ ID NO:3775

LENGTH:151

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04435

SEQUENCE DESCRIPTION:

GATCTTTAGC TGCCTTGTA TCAACTTCTN TGGAGCTTAT GTGATTTCC AGAAAATATC 60  
CAAGGCATAG TTTTGTCCCT AAGTCCCCTG AATATGTAAT ATNTNGTGTGTC TCTCTATTAA 120  
AATAGCACTT TTNGTGCATN CCATTAACAA A 151

SEQ ID NO:3776

LENGTH:150

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04436

SEQUENCE DESCRIPTION:

GATCCATCAA AAGGTTCTTT TTTNATAATC CCTTTGAAA ATAATAATCA AAGGAAGAGA 60

2153480

TGTGGTGTGTT GGTCAATGTGG AAAACTCAAT GTATAATTAA GACGTCTNTC AAAAATCCGA 120  
CAAATAAAAT NAAGCTGGAA CGAAGGCAAA 150

SEQ ID NO:3777

LENGTH:146

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04437

SEQUENCE DESCRIPTION:

GATCCNAAG CACACCAGGA AGATGCTAAA GATGCTTATA CTTTCCTCA AGAATTGAAA 60  
GAAAAAACCA AAGAAGAGCC AGGAATACCA GCAATTCTGA ATGAGAGTCA TCCAGAAANN 120  
NNNGTCTATA GTTATGTTT GTTCNN 146

SEQ ID NO:3778

LENGTH:168

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04439

SEQUENCE DESCRIPTION:

GATCAGAGAA GTTTATGCTC ACTGTCTGAT GCAACTNTCT GGTCTATTG TNAGTAATAA 60  
ACAGGGAAAT CATTTCACT TTTGTTAAA ATAAGGTAT TTACAAGCAT ACCTTGAGT 120  
TATTGTGGGT TCAGTTCAAG ACCACTGCAA TAAAGTGAAT ATCTCAAA 168

SEQ ID NO:3779

LENGTH:149

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04440

SEQUENCE DESCRIPTION:

GATCTGACCC ACCAGTTGT ACATCACGTC CTGCATGTCC CACACCATTG TTTCATGACC 60  
TTGTAATATA CTGGTCTCTG TGCTATAGTG GAATCTTG GGTTGCATCA TAGTAAATA 120  
AAATAAACCC ATCACATTG GAACATAAA 149

SEQ ID NO:3780

LENGTH:144

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04441

SEQUENCE DESCRIPTION:

GATCGGGACC TGACCTGGGG CTGGCCTCAG GCCCACGTGC ACGTAACGTGC CCTCTGTGGA 60  
AGCCAGCTTA AACCTAGCC CTNTNAGAGC TTCCTGTGCC CAGCAGGAAG GAAGTCAAAT 120  
AAACCACACT GACTACCTGT GAAA 144

SEQ ID NO:3781

LENGTH:144

01232

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04442

SEQUENCE DESCRIPTION:

GATCTAGGG GAAAGAGGAG CATTCATCAC AAGTTCTTA GAGAGAGGAG ACAAATCGGT 60  
GTGCCATTGA CAACATGAGC CAGGGTAAAG GCACCCTNN NNNTTACTGA TTTCAAAGAT 120  
TAATAAAGTA ATTCTATTT TAAA 144

SEQ ID NO:3782

LENGTH:139

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04443

SEQUENCE DESCRIPTION:

GATCTATGAC TCATTTGACA GAGAAGCCAA GGAAAAAAAG CTTGCTTGGC CCATTAACTC 60  
AAATCCACCA AATACTTTG TCTAAGTTCT CATTCTTCAT ATTGTTATGC ACCAGAGATT 120  
AAAAAGCTT AACTATAAA 139

SEQ ID NO:3783

LENGTH:137

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04445

SEQUENCE DESCRIPTION:

GATCTGTGTC TTGAAGCAGC TGCCCTCATT CCGACTTCAG AAAATCGAAG CAGCTGGCTC 60  
CTCCCCCTGT TCTCTCTCCC ACCCTCCCCC AAATCTGTT TCATGTAAA GACAAATAAA 120  
TGATGACTTC CCCCAA 137

SEQ ID NO:3784

LENGTH:137

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04446

SEQUENCE DESCRIPTION:

GATCAAAATA AAAATGTACA TGACGGGAA GGGAAAAACC TGTTGGAGTT GCTTCCAGCC 60  
AGCCACGCTC CGGGCCAGCA TGTTGGAATC CAGCGTGGAG CAGATGCAGT AAAAATATGG 120  
TTGGTTCTG TGTGAAA 137

SEQ ID NO:3785

LENGTH:137

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04447

SEQUENCE DESCRIPTION:

GATCTCTCTC TCNTTTACC CCCCTTAGGC TGAGGGTAAA AAGCTGGGAT TGGTAGGCTG 60

01233

2153480

GGTCCAGAAC ACTGACCGGG GCACAGTGCA AGGACAATTG CAAGGTCCCN TCTCCAAGGT 120  
GCGTCATATG CNGNNNN

137

SEQ ID NO:3786

LENGTH:133

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04448

SEQUENCE DESCRIPTION:

GATCGGCCAA GTATGCTNTT NTTTAGAGCA ATGTTTGCC CTAGAGANTT GTAAAATTAA 60  
TGTNATGACT CAGTACATAT GTGTTCGTAC ATATATGATN GGAATAAAAT GTTTATGAAA 120  
TATTNACTCA TAN

133

SEQ ID NO:3787

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04449

SEQUENCE DESCRIPTION:

GATCTGTGTG ACCTCACCTG CATTGATTG AAAAAAGTAT GCGCGTAATT GTACCCACCC 60  
AGTTCAAACC CGTGTGTAAG GGTCAACTGT ACAAAAAAGT TTGTGAAATA AACGTACTGG 120  
AGAATCTTTA AA

132

SEQ ID NO:3788

LENGTH:130

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04450

SEQUENCE DESCRIPTION:

GATCAGTATT TAANATTATA CCAGTTTNA TTAAACCCTT TCCCTCCCCG ATAAAGAATG 60  
TTCTATTCT GCCTCCCTT AAAGGGGAGA CCTCAGAACT AAAGNAATT NATGTTGTGT 120  
TTTTNTTAAA

130

SEQ ID NO:3789

LENGTH:129

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04452

SEQUENCE DESCRIPTION:

GATCCCCCTT CACCTTTGC CATGGTCATA AGCTTCCTNA GGCCTCCCTG GAAGCTGAGC 60  
AGATGCCAGC ACCATGCTTC CTGTACATCC TGCAGAACCA TAAGCCAATT AAACCTTTT 120  
AATAATAAA

129

SEQ ID NO:3790

LENGTH:129

01234

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04453

SEQUENCE DESCRIPTION:

GATCCNCAT GGTGGACACG TCTGTNCTGT ATGTAAAAGG CATTACAAT GTTTTTAGC 60  
AGATGAGACT TGAAGCCTT CCACAGTCCT TGTNCTCTGA GATGGCTGTN GAGCTCTGCT 120  
CANCTGTTN 129

SEQ ID NO:3791

LENGTH:126

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04454

SEQUENCE DESCRIPTION:

GATCCCTACC CCTCANCAAC TAGCTCCCCT GTCGCCAGC TAAGAGAGCT GGGACANTGG 60  
AGGCTGGCAG AAGCTGAGAC GTGACTGTCT AGGAGTAACA CTCATTAAG CTTTCNTTTT 120  
GGCAA 126

SEQ ID NO:3792

LENGTH:126

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04455

SEQUENCE DESCRIPTION:

GATCTGAAAA AGCAACCCAT TTCTAAATT CATATTTNC CTAAAACCTT ACTATGTTT 60  
NATTTAAGA GGTTTCCTGT TATATACACT TTTNACACAT GCAAATAAAC TTTATACCAA 120  
GTGAAA 126

SEQ ID NO:3793

LENGTH:126

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04456

SEQUENCE DESCRIPTION:

GATCTGTTA GAAAATACCT TTGAAAACGA GGGTAACCTT AAAAAATGGA AACTTCAAA 60  
TCCATTTATA TTTNNNTAT AANAAAAC TAATTAAAAG TTTAACAAAC TGGCTGAAAA 120  
CTCAAA 126

SEQ ID NO:3794

LENGTH:126

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04457

SEQUENCE DESCRIPTION:

GATCACTGAG CTGCCNTCA AGGGGACCTG GANNCCGGGT CCTGGGGTCA TGCTGCCTCC 60

01235

2153480

NAGGCTCAA GGTGAGGGTC ATCTTCACGA GCAAAGAGAA CCAATAAGT GACAACGNAC 120  
GTCAAA 126

SEQ ID NO:3795

LENGTH:123

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04460

SEQUENCE DESCRIPTION:

GATCCAGGGC TTTCGAGGCC TCTCCTCATT GAGTTCAGAG TCACATATCA GAGGNTAAA 60  
TCCAAAAGAA ATATGCACAC CCCTCTCCTC CCTCCAGTA AAAATAAATC GCTCCTCTTG 120  
AAA 123

SEQ ID NO:3796

LENGTH:125

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04462

SEQUENCE DESCRIPTION:

GATCTCTGTG CTGTAAACTA AAACAAATTG TGCAATTCTT CCGGGGCCAT CGTCTTGTT 60  
TTCTTTTTTG TCTTGAATGA ATTTAAAAG GAAATATATA ATAAAAATGT TAACCAGAAG 120  
GTAAA 125

SEQ ID NO:3797

LENGTH:119

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04463

SEQUENCE DESCRIPTION:

GATCTGGGGG CCCCCCCCAGC TGGCGGGAAC CCCAAATGGA CACAAACTGT ACATTTGCCA 60  
ATGGGTTTT TTCAGACCAT GGTTTTACT TGCAAATAAA CCTGAGTTCT TTTCTGAAA 119

SEQ ID NO:3798

LENGTH:133

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04464

SEQUENCE DESCRIPTION:

GATCTAAAAN NATACTNTGT TCCCTCATAT GCATGCCCTT CCTTTCTATA TCCTTGACAC 60  
CTTACTTTCC CATTGTAACA ATAAAAAAAG TATCAATAAA ATAATTATTG GCAAATAAAT 120  
TGGTGAGTTG AAA 133

SEQ ID NO:3799

LENGTH:119

TYPE:nucleic acid

01236

2153480

TOPOLOGY:linear

CLONE:HUMGS04465

SEQUENCE DESCRIPTION:

GATCCTGCAG TGATGGAATG TTCTGTCTTG ATTGTAGCAA CACCAATATN CTGATTGTNA 60  
TATTATACTA TAGTTTGCA TAACAGTTAC CATTAAGGA AATTGGGTAA AAGGCTAAA 119

SEQ ID NO:3800

LENGTH:118

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04466

SEQUENCE DESCRIPTION:

GATCTCTTAG CAAATAGGAA TCTAGGTGTA GAATTTATAC ACATATATAT TTTAAAAAGT 60  
ATAAAAATGA GAAAGTATGT ACAAAAATC ATCCTAAATC TTAGAAAGGA GACATAAA 118

SEQ ID NO:3801

LENGTH:117

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04467

SEQUENCE DESCRIPTION:

GATCTGGGAG CCAGCAGCTG GATGCTGTGG CTGCCAGAN ACACCTCCAG GCTGTGGCCT 60  
GGGGGCTGGG GGGAGCCCCA GGCTGAAAAG GGTCCAATTAA AAACAAATGG AGCCAAA 117

SEQ ID NO:3802

LENGTH:117

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04468

SEQUENCE DESCRIPTION:

GATCACATTC CAGCCCTCGC TGCTGGGTG CACACCCCTT CCTTAGNTGA TGTGCTTGGG 60  
AAACTCCCTC CCCCTCCTTC CCAAGAGAGA AATAAAANCA CCTTCGCCTA GGNCAAA 117

SEQ ID NO:3803

LENGTH:116

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04469

SEQUENCE DESCRIPTION:

GATCCTGACC TCCTCCAAGG AAGAAATCCA GAAAGCCTTA AGACTAAGAC AACTTGACTC 60  
TGCTGATTCT TTTTCCTT TTTTTTNN AAAANAAAAA TACTATNANC TGGAAA 116

SEQ ID NO:3804

LENGTH:115

TYPE:nucleic acid

01237

2153480

TOPOLOGY:linear

CLONE:HUMGS04470

SEQUENCE DESCRIPTION:

GATCAGAACT CCAAAACCCAC TCCCACCCCT GAAGGTCGGG AGGGTCTGAG CAGCCCTGGT 60  
GGCTNCTTGT GCTCAGGTCC TCAGCTCCAT GGGAAATAAA AATGGCACCC TGAAA 115

SEQ ID NO:3805

LENGTH:114

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04471

SEQUENCE DESCRIPTION:

GATCAACATA TTTAGCTTAT ACAGAAATAA ATTAAGTCA ATCCACTCAC AAAGAATTTC 60  
TATTTTGAA AAATGTAGCT TGTATTCAG TATAATAAAA TCTGATGTAA GAAA 114

SEQ ID NO:3806

LENGTH:114

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04472

SEQUENCE DESCRIPTION:

GATCANAGCT NTCCCAAAGA GGGAAAGCGG TGAGGTTNA GGAGGGGCAG AAGCAGGGCC 60  
GGCAAAGNTT GTACCTNCAT AAGGTGGTAT GGGGGTTGG GGTCAAGGCC TGAN 114

SEQ ID NO:3807

LENGTH:112

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04473

SEQUENCE DESCRIPTION:

GATCGAAAGA CTCAGGGAGA GCGGTCTNA CCACCTGGAA GTAAGTCCA CCTGGACCTT 60  
ATNAAAACTA CTCACTCCAC CTGGCCCCCT GCTGAAGCCN NNTTTAAAAA TN 112

SEQ ID NO:3808

LENGTH:111

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04474

SEQUENCE DESCRIPTION:

GATCTGTTTC GTGCATTGGA AGACCCCACC CAAGCTTGGC ANACTAANTN TTGTATCCTG 60  
GGGCTCCCTN CATCTCCAGG GAGACCAAAAC CCCGGCCCTA CCAGNGCCCG N 111

SEQ ID NO:3809

LENGTH:108

TYPE:nucleic acid

01238

2153480

TOPOLOGY:linear

CLONE:HUMGS04476

SEQUENCE DESCRIPTION:

GATCAAGACT AACAAATAAC TTTGTGATGA AAATNCTTC AAAATATAGC TACTCTTTC 60  
AAGTATAACCA TTTAAAATAT TTCACTCAGGC AGAGCCCTGA CCAGGAAA 108

SEQ ID NO:3810

LENGTH:108

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04478

SEQUENCE DESCRIPTION:

GATCAAGAAC ANTNAAGGACA ACGAGAAAGT TTAAAAGTTC GAAAGCAGCA AGATNCCTT 60  
CCCCCCTGGT CAATCNCTGA CACAAGAGAA GGCAGAGACC CTGAAGCN 108

SEQ ID NO:3811

LENGTH:182

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04482

SEQUENCE DESCRIPTION:

GATCTTCAAG CAAGGAAAT GATTCTAAA AGGATTATCT GAAATTGAAA AACTAGTAAG 60  
CAAATAATG ATAAACATAA GTAAATTAA NCTGTTGTT GTATAAAACA ATTATAATGA 120  
NGTGTATA AGANATTGTA AACAAATGTA AANCTAAATN ANCATTGTTA TGCAACATTA 180  
AA 182

SEQ ID NO:3812

LENGTH:105

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04483

SEQUENCE DESCRIPTION:

GATCTCCCAC AACTAAAAAG TACAGTACTT GGAATTGTGT TCTTTATGGT TGTAGTGTG 60  
GTAAAGCACT AATATGCAGA AAATAAAGGA ATTACACAGT GCAAA 105

SEQ ID NO:3813

LENGTH:105

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04484

SEQUENCE DESCRIPTION:

GATCCNAAGC AGTGAACATG CTGTTAATAC TTGTAAGACT CCTAGCAAAC TGCATTTAAT 60  
TTTTAAATT AGTTTAGTG TACATAAAGG CATGTNTTN CCAAA 105

SEQ ID NO:3814

01239

2153480

LENGTH:105

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04485

SEQUENCE DESCRIPTION:

GATCCATGGG ATTNATAATT GAAATAGAGA TTGGAGACCC TCCTATTCA TTCATAAGCA 60  
ATNGCACAC AGGT CANATG CAGTTATCTN AACTCCAGGA AATTN 105

SEQ ID NO:3815

LENGTH:104

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04486

SEQUENCE DESCRIPTION:

GATCTTGCTA AATTATTAGT TCTAGTAGCT TTTTGTAGA TTCATTAGGA TTTNTACAT 60  
ACACAATCAT GCTATTGCA AATAAAATAA TGCTTTATC CAAA 104

SEQ ID NO:3816

LENGTH:104

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04487

SEQUENCE DESCRIPTION:

GATCGAGTCC AAGGNAGACT ATGTCCTCTN CTACCAACGN CAGGNCGTGG CGCGACGCCT 60  
GCTGTCCCCG GCCGGCTCAT CTGGCGCCCC AGCCTCCCC GNCG 104

SEQ ID NO:3817

LENGTH:103

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04488

SEQUENCE DESCRIPTION:

GATCAGCACT GTGGTGAGCT CCAAGGAAGT GAATAAGTTT CANATGGCTT ATTCAAACCT 60  
CCTTAGAGCT AACATGGNTG GGCTGAAGAA GAGAGACAAN NNN 103

SEQ ID NO:3818

LENGTH:103

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04489

SEQUENCE DESCRIPTION:

GATCCCAAAC CTNAGCTAA TCAGTATTGC CAGANAGGGG TAAGACTGGT TGGAAAGCTGA 60  
CTGCAGACTT NNNTCCCT TAGTATGTNC TGTGTTGTAA ATN 103

SEQ ID NO:3819

01240

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04491

SEQUENCE DESCRIPTION:

GATCACTAAG CAAAGCTGCT AGTGGGATT C TATATTCGT GTCATCTTT TTATNATAAT 60  
NTATTGCAA A TATTTCTG AATAAATATA TGTTGTGTGA AA 102

SEQ ID NO:3820

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04492

SEQUENCE DESCRIPTION:

GATCCTGCCA CCAGGGTTNT TTTGAAATAG TACCACATGT AAAAGGGAAT TTGGNTTTNA 60  
NTTCATCTAA TCACTGANTT GTCAGGCTTT GATTGATAAT TN 102

SEQ ID NO:3821

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04493

SEQUENCE DESCRIPTION:

GATCTTGTC AATCGAAAC CCCCGTTACC TCCTCTTTT CTTTCTCTT CTTTTTTTT 60  
TTTAACTNAA ANATTTNAT GATGATTAAG ANGGAAGTNG TN 102

SEQ ID NO:3822

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04494

SEQUENCE DESCRIPTION:

GATCCCAAC ACTCNATCCT GTAAGNCGGG TACAGTCCTA TTGTNTGTTN NCACACTGAT 60  
GATGTGAGCC TGTGAGATGA GCCAATCACCC AGTTGTTATG TN 102

SEQ ID NO:3823

LENGTH:101

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04495

SEQUENCE DESCRIPTION:

GATCTCATGT ACTGAAAAAA AATTCTTAAT TTTATTGGAG TTTATACACAC TGTGAAACTG 60  
CAATATGACT GTAAGAGAGT AAAAAGATTG TNACATCTAA A 101

SEQ ID NO:3824

2153480

LENGTH:101

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04496

SEQUENCE DESCRIPTION:

GATCTGGGAG TCTGAATGG TAGCNTTTG TCCCTGTCTT CACACTATCA TAGGGAGAAT 60  
CAAAAGANCT AACAAATATA ANCAGCTTT GTGAATNNCC N 101

SEQ ID NO:3825

LENGTH:100

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04497

SEQUENCE DESCRIPTION:

GATCTNTTT NTNTCTATT TTTGAGGTAC ATGCTACATA CATTNTNT GTAAACAAC 60  
ATTTAGCATA TTGAATAAAA TAACATTTA AAAATAGAAA 100

SEQ ID NO:3826

LENGTH:97

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04498

SEQUENCE DESCRIPTION:

GATCCCACGG CNAACACTCA CCACNCGCTA CCATACGCCN TCCCAGAGCT AGGGGCTGCC 60  
TTAAAGGAAA TTGTAGCCTA AGTAGGTCA GGCAAGN 97

SEQ ID NO:3827

LENGTH:96

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04499

SEQUENCE DESCRIPTION:

GATCAGCCAC ATCAACTCAG TTGTCCACCA CAGGGAAATT TTNAATGTCT TTTGTTTTG 60  
TNTTGTTTG AAAATAATA AACAGGCAAC TGTAAA 96

SEQ ID NO:3828

LENGTH:95

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04500

SEQUENCE DESCRIPTION:

GATCTATTTG GCCTCTAAA TGAAC TGAGA TTCTGTAA AAAAGATTGA TGTTATTGTC 60  
TCTTGAGAG GAAACTAATA AAGCTGCAGG NGAAA 95

SEQ ID NO:3829

01242

2153480

LENGTH: 94

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04501

SEQUENCE DESCRIPTION:

GATCTATCAT AATTGCTTT CTGATGCATT TAAAAATAAA TGGAACACTT AAATGTATAT 60  
TACCGATGCA AACTGTGGAT AAAGTTGAAA GAAA 94

SEQ ID NO:3830

LENGTH: 94

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04502

SEQUENCE DESCRIPTION:

GATCACAGGC CTGGCCGCGG TAACAGACTT TTACATGGAA TTGTTTAATT ATTTGTACTT 60  
TTCATGCCAG AAAATAAAAG TTCAGAACATCT TAAA 94

SEQ ID NO:3831

LENGTH: 94

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04503

SEQUENCE DESCRIPTION:

GATCACTACG ATTAACGACG GTCGTAATGT TAAGACGTGCG TCTCCATGAN CTTTGGGGGG 60  
ACTTTAATNT GGAATAAAGA AACTATCACT NAAA 94

SEQ ID NO:3832

LENGTH: 93

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04504

SEQUENCE DESCRIPTION:

GATCCAGATN AAGTGCTGAA GAAAAGAAAA AAGAAGTGGAA GAAGAGTATG NTTATNCTTC 60  
TCCTTATTAA AGAAATTNC TCAAAACAGC AAA 93

SEQ ID NO:3833

LENGTH: 88

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04506

SEQUENCE DESCRIPTION:

GATCTATCCA GTGACGTGGC CTGGTGGCG TTTCTCCTTG TACTTATGTG GTTTTTGGC 60  
TTTNAATACA GACATTTC TCCAGAAA 88

SEQ ID NO:3834

01243

2153480

LENGTH:86

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04507

SEQUENCE DESCRIPTION:

GATCCCAAAA TATGGTAAAG TGAACCCATC TGTCTGCATT TTCTACTCTG AGCCCATTTG	60
TTAATAAAC A CTTATTTTA TATAAA	86

SEQ ID NO:3835

LENGTH:84

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04509

SEQUENCE DESCRIPTION:

GATCCGGGCC CCAGGCTGCT GCGGCTTTT ATAACTTAT ATTATTTTN TTTTAAGAAA	60
AAAAGCTCTT TAAAATACCT CAAA	84

SEQ ID NO:3836

LENGTH:82

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04510

SEQUENCE DESCRIPTION:

GATCTGAGGA GCAAACCTCC GTGGCACACA TTTACCTGCA TAACAAACCT GCACATCCTG	60
CATGTGTACC CCAGAACTTA AA	82

SEQ ID NO:3837

LENGTH:81

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04511

SEQUENCE DESCRIPTION:

GATCCAGGAG GCTAAAGAG AAGCCAAGTC AGCTTGTTG TGATTTGATT TTTTTAAAAA	60
AACTCTTGTA CAAAAGTAA A	81

SEQ ID NO:3838

LENGTH:81

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04512

SEQUENCE DESCRIPTION:

GATCGCTACT GTTATGTGGG ATTATTATTT CTAAATNTTA CTCATTGAAA TAAGCATAACA	60
ATAANANGCA TTTATTGCAA A	81

SEQ ID NO:3839

01244

2153480

LENGTH:80

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04513

SEQUENCE DESCRIPTION:

GATCAAACAA AGACCCAGCT TATTTCTGC TTGCTGGTAA ATTAAGCAAA CATGCTATAA 60  
TAAAAACAAA ATGAAGGAAA 80

SEQ ID NO:3840

LENGTH:78

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04514

SEQUENCE DESCRIPTION:

GATCTGGTG AAAATTGTAT TTCTATGTAA ACTCAACGAT ATGTTGGTT TTCCTGAAAA 60  
TAAATAATTT TAAATAAA 78

SEQ ID NO:3841

LENGTH:75

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04515

SEQUENCE DESCRIPTION:

GATCCTCACCA CCTCAGCGTC CCAGAGTGCT GGGATTACAG TTGTGAGCCA CTGTGCCTGG 60  
CCTTTTTTT TTTTN 75

SEQ ID NO:3842

LENGTH:74

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04516

SEQUENCE DESCRIPTION:

GATCAGAAAT CTGAGGTTCA ATGAGGCCAG AATAACTCAG CTTCAAAATG AATAAATGTG 60  
GAAGCCAGCA CAAA 74

SEQ ID NO:3843

LENGTH:72

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04517

SEQUENCE DESCRIPTION:

GATCTCCCCT TGGACTGATA CCCTTTCCC ATTCAATTAC AAATAAATTA CAATGGGTGC 60  
TGAGAACTTA AA 72

SEQ ID NO:3844

01245

2153480

LENGTH: 78

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04518

SEQUENCE DESCRIPTION:

GATCTGTGTC ATGGTTTAT AACCTTTNTN TNTTGAAA CTTGAATGTT CAAAATTAAC 60  
ATGCTGTTA CTCTGAAA 78

SEQ ID NO:3845

LENGTH: 71

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04519

SEQUENCE DESCRIPTION:

GATCAGGAAG AACTAAACAA AACCCACACT CCAAAAAACTA ACAAAAGAATA AATAAATAAT 60  
ATAAAAATAA A 71

SEQ ID NO:3846

LENGTH: 71

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04520

SEQUENCE DESCRIPTION:

GATCTCAGAA CAGANTTAAA ATATTGTGAA AATTACAGCT TAATAATGT TTATTGTAAT 60  
TTTNTTGAA A 71

SEQ ID NO:3847

LENGTH: 69

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04521

SEQUENCE DESCRIPTION:

GATCTAGGAC TTGCCTTATT TTATCATTTC TCTTAATAA TCTCCAATAA ACTTTCTTA 60  
TTCATTAAGA 69

SEQ ID NO:3848

LENGTH: 69

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04522

SEQUENCE DESCRIPTION:

GATCACCACT AAAGAACTTA CTCATATAAC CAAATACCAC CTGTNCTCCC AAAAACCTAT 60  
GGAAATAAA 69

SEQ ID NO:3849

01246

LENGTH:69

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04523

SEQUENCE DESCRIPTION:

GATCAGTATG CTGTTTAAT AATTATGTGC CATTAAATA AAATGAAAGG GTCAACGGCC	60
CNNTTTAAA	69

SEQ ID NO:3850

LENGTH:67

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04525

SEQUENCE DESCRIPTION:

GATCTACACT GATGATTAAA TCAAATTGGC TAAGATTATT CGTTCTAATA AAAGCACTGA	60
CTCCAAA	67

SEQ ID NO:3851

LENGTH:67

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04527

SEQUENCE DESCRIPTION:

GATCTCTCC TGTTTGAC ATAGATTAT TTTTCAGTTC CAAGAAAGAT GAATACATT	60
TGTNAAA	67

SEQ ID NO:3852

LENGTH:67

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04528

SEQUENCE DESCRIPTION:

GATCTAGCAT ATGTATCTT TTAAAGGTA TTGTTAATAA ATATNCTGTC ATTTGTAAAG	60
ATANAAA	67

SEQ ID NO:3853

LENGTH:66

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04529

SEQUENCE DESCRIPTION:

GATCCATCTT CAAATCAAGG GCTCCCTGGC TACCAAATNC TGTCTAGTAA AAATNATTG	60
AGCAAA	66

SEQ ID NO:3854

2153480

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04530

SEQUENCE DESCRIPTION:

GATCTATTCA ATGTACAAAAA TATTTGAAA GTTCTGTGA TTAAATGTNC TTTGAAAACA 60  
TAAA 64

SEQ ID NO:3855

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04531

SEQUENCE DESCRIPTION:

GATCTGTTAT NAACACCTTT GTGGCTTGG TTCAGTAATA AATATGTNAG ACTTTTCATT 60  
TAAA 64

SEQ ID NO:3856

LENGTH:62

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04532

SEQUENCE DESCRIPTION:

GATCTGTGTA AGCTCTGAAT GAACTTCTTT ACTCAATAAA ATTAATTTT TGCTTCTTA 60  
AA 62

SEQ ID NO:3857

LENGTH:61

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04533

SEQUENCE DESCRIPTION:

GATCCAAGAT ACGTCATTTC TGTATTGGCA AAATGCCACT ATTAAAGTGT AATTCTTGAA 60  
A 61

SEQ ID NO:3858

LENGTH:60

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04534

SEQUENCE DESCRIPTION:

GATCTCAAGT GCTTAATGAT AAGGTGTTGA CTTGTTAAAT TAAACCATTG GGAATACAAA 60

SEQ ID NO:3859

LENGTH:60

01248

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04535

SEQUENCE DESCRIPTION:

GATCAAATGC CCTAAAATGT AGTGACCCGT GAAAAGGACA AATAAAGCAA TGAATACAAA 60

SEQ ID NO:3860

LENGTH:60

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04536

SEQUENCE DESCRIPTION:

GATCTGAGAC TTTGAGTCTC CAGAACTGTG AGAAAATAAA TTTCTGTTTC TTAAGCCAAA 60

SEQ ID NO:3861

LENGTH:60

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04537

SEQUENCE DESCRIPTION:

GATCTTCCT GTCTCCCCA AGTTTGCATT TCCGACATTA AAGTTACTT TTNAGTTAAA 60

SEQ ID NO:3862

LENGTH:59

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04538

SEQUENCE DESCRIPTION:

GATCAATCAG GGAGAAAATA CAGAAGAGAA TAAAAAGAGA CTCATTCAGT GGAAGCAAA 59

SEQ ID NO:3863

LENGTH:59

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04539

SEQUENCE DESCRIPTION:

GATCTGAATT AAGCTGTCTG CCATTGGAG AAATTTAAAT ACTATTTAA ACACACAAA 59

SEQ ID NO:3864

LENGTH:58

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04541

SEQUENCE DESCRIPTION:

GATCCACCCA GGCCTTCNG TGAAATAAA GCTCCCAAGT TGGGTACAAA CCAGGAAA 58

01249

2153480

SEQ ID NO:3865

LENGTH:57

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04542

SEQUENCE DESCRIPTION:

GATCCCAGTC TGAAGGAGTA TTGTGAAGAA TAAATGAGAG AATGTGTAAA TGGCAA 57

SEQ ID NO:3866

LENGTH:56

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04543

SEQUENCE DESCRIPTION:

GATCTGTGTA TTTGATTTG TACTTAACAT GTGACAAATA AACCTTTGG GAGAAA 56

SEQ ID NO:3867

LENGTH:55

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04546

SEQUENCE DESCRIPTION:

GATCTAATTG TGAAAACATT GTAATAAAAT ATNAGCTAT AATGGTATTT TCAGA 55

SEQ ID NO:3868

LENGTH:55

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04547

SEQUENCE DESCRIPTION:

GATCTCGAGC GTTTATCTCG GGCTTTAATT TGCTAAAGCT NTGCACATAT GTAAA 55

SEQ ID NO:3869

LENGTH:85

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04548

SEQUENCE DESCRIPTION:

GATCTGCCAT GCACTCCAGC CTAGGCAACA AGAGTGAACCTTGCTCTAAA ATAAAATAAA 60

ATAAAATAAT AATAGTAATA ATAAA 85

SEQ ID NO:3870

LENGTH:52

TYPE:nucleic acid

01250

2153480

TOPOLOGY: linear

CLONE:HUMGS04552

SEQUENCE DESCRIPTION:

GATCAAAGGT CATTGTGTA GATGAGTAAT TAAAAAATAT TTAAATCACA AA

52

SEQ ID NO:3871

LENGTH:51

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04556

SEQUENCE DESCRIPTION:

GATCAAATAG AAACAGGGTT TGCAAGTNTC CATACTAGATG CCTCTACCAA A

51

SEQ ID NO:3872

LENGTH:50

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04557

SEQUENCE DESCRIPTION:

GATCCTATGT AAAATATATA TTTATGTATT AAAAATACTG AAAACATAAA

50

SEQ ID NO:3873

LENGTH:443

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04597

SEQUENCE DESCRIPTION:

GATCCTATTT TATAAGGAAT CTTTTTATA CGAATGTACT TATTCTTTA GATATCAGTT 60  
CTTGAATGTA TACTCCTTAT GATATACAGC AAGAGATTCT TGAGGTTCCC AAGAATTGTC 120  
CTGGAAAGAA AATTGATTTT GAATTGAGAT TAGCAGTGTT TTAATTCGC TGAGATAACT 180  
CCTTTAACTC AGCACTTCA CAAAACCTAA ATATTAAATA AATTGAATTG GAGGCTGGCA 240  
TTCTTCTCTA AATTGAATTG GACTGGTTGT TTGCTGAGGT ATGAATGGAG CAGCTCGGAA 300  
GTATTATAAT TCCGTAGCTG AAACAGGACG CTTATTTATG TATGNTCCAA TCTCTNCTCA 360  
TTTAAAAATG NCTCAGCATT TCCNGCCATT TAGATAGGTA AATNAATAGT CCATTANNTT 420  
TGNTNACCTA CCATAANTAT TTN 443

SEQ ID NO:3874

LENGTH:423

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04598

SEQUENCE DESCRIPTION:

GATCTATGGT ACAGTTCATT GGCAGAGAAAT CCAAGTACTG TGGACTTTGT GATTCCATAA 60  
TAACCATCTA TCGGGAAAGAG GGCATTCTAG GATTTCCGC GGGTCTTGT CCTCGCCTTC 120  
TAGGTGACAT CCTTCTTTG TGGCTGTGTA ACTCACNNCC CTACCTCGTC AATACCTATG 180

01251

CACTGGACAG TGGGGTTCT ACCATGAATG AAATGAAGAG TTATTCTCAA GCTGTCACAG 240  
 GATTTTTGC GAGTATGTTG ACCTATCCCT TTGTGCTTGT CTCCAATCTT ATGGCTGTCA 300  
 ACAACTGTGG TCTTGCTGGT GGATGCCCTC CTTACTCCCC AATATATACTG NCTTGGGATA 360  
 GACTGTTGGT GCATGCTACA AAAAGAGGGG GAATANGNAG CCGAGGGAAA TAGCTTATTT 420  
 TTN 423

SEQ ID NO:3875

LENGTH:413

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04599

SEQUENCE DESCRIPTION:

GATCCAATN ACCATCATCT CTGATGGAGA TGGGTTGGGT ACCTGGCCTT CATGGCACCT 60  
 TCACTGCTAG GGATGCTCAA GGGGCAGGCC TGGGGCCTTC CCTCCTGTCT CTTCTCGGTC 120  
 TTTCCTCTCT GAGCANCCTC CTACCTCCCC TGCCCTGAGCC TCACTCCACA GCCCTCCCAG 180  
 GTACCTAGCA GAGGCTGTCA GTCCCTGGCT CACCTGGAAC AGGGCTGGGG CTGGGTTGGA 240  
 ACAAGGTGTG TGCCNCACCA CATCTCTATG ACTCTGTTCT CCCTCCCTGC ATTGTGGCTC 300  
 TTGTATTGAA GGGCCTCAAG AGAGTGAGGC CCTACCATCA CTGTCCATAT TAAGTCCAAG 360  
 CCCAAGTGNG GTTCCCTCTGT TCCCTCNTAA GCAATCAATN GTTNAGTTTC TAN 413

SEQ ID NO:3876

LENGTH:410

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04600

SEQUENCE DESCRIPTION:

GATCCACCTG CCTCGGACTC CCACAGTGCT GGGATTACAG GTGTTAGCCA CCACCCCGAC 60  
 ATTATTTGAA ACTTTTATTT TATCATGAGA GAGTCCAGG AGTCAACTGG AGAGAGATT 120  
 TTGGTATGAA AATTACATAT GCAAAAAGAC TGATTCCAGT ACATGAAATT AAATTCAACA 180  
 TTTACATTAA ATGCCTTCAA ATATGGTAAA ATGGTTCTT TTGGCACNNT ACCTCATTAT 240  
 GTTTGAATG ATTTGGTCTA TCATATGAAA TAACTTTAT AAATATAGTA NCTCAGGCCT 300  
 GGGCACAGCG GCTCAAGTGG GAGGNCTGCT TAAGCACCCG AGTTNAGAC CAGCGTGGAC 360  
 AACATGGGGG GACCCCTTNC TGTCCCAAAA NTAGCTGAGC ATGGCAGCGN 410

SEQ ID NO:3877

LENGTH:402

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04601

SEQUENCE DESCRIPTION:

GATCCCAACA ATGGAACCTT CCTTCTCTGC TGTCAACAAA GGACTAAAAA ACTTCTGTGT 60  
 GATTTGATAC AGACAATTAA GAAAACTTT GTTCAAAGT TTCCCATCCA GACTAGCCAA 120  
 GGAGAGCAAG GGAGGGNNNC TAATAAGCCC ATTAAGGTGT CTTCCCAAAC AAATGTTTC 180  
 TTTGTCCTTC TGCCCAAATG CAGAAACAGC TGCAGCTTAA AAAANTAGCA TACTTTATC 240  
 TTTTGANGGA AATATGTGAA AGTTTAGCA CTGGTTGTCT TTGGTTGGCA AGAAATTGTT 300

NAGTGTATN NATTNCTTCC TATTTGNCTG AATTTNCCA AATTTGTCCA CAGCAAGCAT 360  
 GACTACTTN NTCATATNAA ATCTCCANTG NATTTATGCA AA 402

SEQ ID NO:3878

LENGTH:393

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04602

SEQUENCE DESCRIPTION:

GATCTTGCA CTAAAATCTA ATTATATATCA AATTTATGAG AGAAAGTATT TTCCTTAATNA 60  
 TGGTCAAATA AATTTGGTTA ACATCCTAGT GATTCTCTTT CTATATAATA AGGCAATTAC 120  
 AGTTTCAAA GCATTAAGTC TAACATAACT TTAAACATTTC TCTTAGGTTT CAAGACACTT 180  
 CTATTTAATA TTCATTGGGG AAAAGTTGTC CAGCTATCAG CTAGNGAAAA CACATGCAAA 240  
 TATGGTTGTG TAAAGTTAAC GGTTATANGG NANNANANAT CAGTAGAATT ACATAATACT 300  
 AAANGTTGCA GTTGAAGGAA TATCCCAGTN TGTGTTGGTA GTTNCTNNAA GNNTNTAGC 360  
 TGTNATTGCC TTGTTTTNT AGCCCTTNGT TTN 393

SEQ ID NO:3879

LENGTH:392

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04603

SEQUENCE DESCRIPTION:

GATCTNAAGC TTNCNTCTTG GACACCCCAT ACCCANAGTC CTCCAGGCCA CCCTTAAGTA 60  
 CAATGTTCTC CTACCTAAGA AGGCATCTGG ATTTNTCTT TCCTTGGAAA TAGTAAAGAA 120  
 CTACTCTTG ACTGTTTTG ACCTCACAGT GAACCTCAAA TACACTGGAA TTCGCAATAA 180  
 ATCCAGTATG GTGGTTATAG ATGAAAAAT GCTATCAGGA TTTACTCCAA CCATGTCATC 240  
 CATTGAAGAG CTTGAAAACA AGGGCCAAGT GATGAAGACT GAAGTCAAGA ATGACCATGT 300  
 TCTTTCTAC TTGGAAAATG TTTTGGTCG AGCAGACAGT TTCACTTTT NCTGTTGAGC 360  
 AGAGCAACCT TGTGTTCAAC ATTCAAGCCAG GN 392

SEQ ID NO:3880

LENGTH:385

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04604

SEQUENCE DESCRIPTION:

GATCTCACCA CTGCACTCTA GCCTGGACGA CAGAGGGAGA CTGTCTCCAA AAAAAAAACAA 60  
 AGAAAAGAAAG AAAAAACTGT AAAAAAAAT TTNCTGCAAT GGNCTTAATA TGTGTTGCCC 120  
 TTAAAAATGT ATATATTGAA ACTCTAATCC CAATGTGATG TTATTTAGAG GTGGGGCCTG 180  
 TAGGAGGTAA CTGGGTCTA AGGGTAGAGC CCTCATGANT GAGATTAGTG CCCTTATAAG 240  
 ANGCCCCAAA GCTAGCTACC TCTNTTTCCA CTATGTAAGG NTACAAAGNG AAGTTGGCTG 300  
 TCTGCAAACCT AGAAGAGGGC TGATACAGTT TGGCTGTGTC CCCACCCAAA TCTTCATCTT 360  
 AGGTTTTAA CTNCCGCAAT TCCCN 385

SEQ ID NO:3881

LENGTH:383

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04605

## SEQUENCE DESCRIPTION:

GATCTTAAGG TAATTACAAA AGGGAAATTC CAAGAACGCA TAACACAATG ACAACATGGT 60  
 GAGAAAAGTG CAGTACTACT TCCAAGGTAG CTAGTGTAAA GGACACTTGA GTTTTTAAAAA 120  
 CTGTGGTTAA ATGTTTATG TGGAATTGTA TGAGTTTGTAT TATTAATAC CACTGCTTGC 180  
 TGCTTTACT AGAACATCAAGT TAAGGGNCAC GTTAGAAATA GAACAGCTTA ATATCACTGG 240  
 CTTCAGAGCA AAATGAGCTC GGGTGAUTGC AGATTATGAT GGTAAATATG GCTTTAATTA 300  
 CAAACATGNG GNATGATTCA CTGAAGGTGA AAAGNTAGGG CGGNTGTGNT ATTGAAAAAA 360  
 AACCCANCAT TTTGGCATT GAN

383

SEQ ID NO:3882

LENGTH:383

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04606

## SEQUENCE DESCRIPTION:

GATCTATTTC TCAGTAATGA GTGTGTNCTC ATGCCCTGTTT CAATATTGGG TTTGGAGCA 60  
 TTATTGTACC AGGCTGTTGA TTGCATACTG TAGAAGATTG GATGTTCANA CTGGTTCTTC 120  
 TTCATATACT ATGTTTNGTC TCAGTTNCTA TGCTATTGGA TGATACTTCA TTTGTTGTTC 180  
 TGGTGCTGAT GAAAAGGGNA ACCTGCTCTC CTCTATTAG ACCTTGACAC TTATTACTGC 240  
 TCAGTTGTTN CTGGAGCTGA AGNAATGAAA NGTCTGGAAG GAACAGCTAT CAGATGTGGC 300  
 CATTTGGATT GTNACAAATG AGGAACCCCTG TGTACTGGGA CAGTTGCCAN AATAATATAT 360  
 GTGGCCTNCT ATAATGTGCA TTN

383

SEQ ID NO:3883

LENGTH:380

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04607

## SEQUENCE DESCRIPTION:

GATCTGAAGC CAGAAGGGCT GAGTGTATTG TNAACTTATT CTTGCATGTN GCTGTCCTGGG 60  
 AATGGACCAC ACTACACGAG GTAGTNCTGG GGGCGATACT GCCGAAAGNC CGANCACATG 120  
 TATTTGGCT GCAATTGAGG NNCTGGGAT GCTATTAAATT TTGTATTTC GCAACTGCC 180  
 CCTTCTCTAT CCCAAAGCAC CAATTACTNC CCTCTGCCTC AGNGGTACCA GTATAAGATG 240  
 ACATTCAAA GACTGGAGGC AACTCAGCCT GAGTTAATTC ACAAAATTAT GCCATGCTGG 300  
 GGCTTGAGCT TGAGCTTGGG CTTAGGCTTG GGCTCAGCTT TTGACCCCTCA GGCATCTCCT 360  
 TTNCCTNCT GTCTTNCTT

380

SEQ ID NO:3884

LENGTH:377

TYPE:nucleic acid

TOPOLOGY: linear

CLONE: HUMGS04608

SEQUENCE DESCRIPTION:

GATCTGTCA CAAGCTGGTG TTCAGGAACC AATGTGTGAC TGGTCCATGC CCACCTCTGA 60  
 TTATATGGAC TCAGAGACAA TGACATGGG AGTGCTTGC CAGTGGAAA GTTTCTACAA 120  
 ATGGGAGGTA ATTGCATGGC AGGTGTAAAG TTATTTGGAC CATTGAGGCC AGAAAAAAATG 180  
 TAGATTTAAA ATATACTGAT ACTGAAAGCA GANCTGTTG ANCTAATTGC TAATTTAAG 240  
 GNATTCAAGAC ATTCACTCCA AGGNTTTAGG CCAAATGTTG CCTAAATGTG TTCTCTATTG 300  
 CATATGAAAG TGATTTCNGC GGCTTAACNG TTCTCTNCTN TTTATGTCCA TGGCCATAGC 360  
 TGGTTGTNTT CACATGN 377

SEQ ID NO: 3885

LENGTH: 367

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS04609

SEQUENCE DESCRIPTION:

GATCAAGGTG AAGCTCACAG TGTCAAGGCTT TCTGGGAGAG CTCACCTCCA GTGAAGTCGC 60  
 CACTGAGGTC CCATTCGCC TCATGCACCC TCAGCCTGAG GACCCAGCTA AGGAAAGTTA 120  
 TCAGGATGCA AATTAGTTT TTGAGGAGTT TGCTCGCCAT AATCTGAAAG ATGCAGGAGA 180  
 AGCTGAGGAG GGGAAAGAGAG ACAAGAACATGA CATTGATGAG TGAAGATGTC GGCTCAGGAT 240  
 GCCGGAAAAT GACCTGTAGT TACCACTGCA ACAGGGCAAAG CCCCCACAGTT TAGTCCTTG 300  
 GAGTTATGCT GCGTATGAAA GGATGAGTCT TCTTCCGAGA AATAAAGCTT GTTTGTTCTC 360  
 CCTGAAA 367

SEQ ID NO: 3886

LENGTH: 360

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS04610

SEQUENCE DESCRIPTION:

GATCAAAGTA GCTTACTATA TCTAAACTGT AAAACAATAT AGTTTCTCCT GAACACCTGC 60  
 TTTCCTCTG GGAGTCTGGA ATTTGGTAT GTGCCAGGCA GAGACTACCT TTGTGACCAAG 120  
 CTCCCAGTAA AAACCCAGG CACTCAGTCT CTAACAAGCT TTTCTGGTTG ACAGTGTTC 180  
 ACAAGTGCTG TTACAACCTGG TTGCTGGGAG ATTAAGCTC ATCCTCTGTG ATTCCACTGG 240  
 CGGAGGATTC TTGGAAGCTT GCACTTAGTT TCCCCTNGAC TTCACCCCAT GTGTCTTTT 300  
 TCCTTTGCTG ATTTGTTTT GTATCCTTTC ACTGTAATAA ATCATGGCCG TGAGCAGAAA 360

SEQ ID NO: 3887

LENGTH: 359

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS04611

SEQUENCE DESCRIPTION:

GATCGCAAGT GACTGCTTCC GCTTCCAGGA CTGGGCCAGC TAGTGGGGT GGCAGAGGTC 60

2153480

TCTTGCTTC ATTCAGCCCT AGCTCTGTAG AGAAATGCAA ACCTCGACTC TCAAGGATGT 120  
GAGGAACACA AGTTCATTC TGTTGTTGCG GAGACACTGC AGACTCCACT GTGCCGAGGT 180  
TGAACTCTN NTTGTTGCTC AAGTTCTAGG AGTCCCTTC CTGAATATAT ACTTGTGTTGT 240  
CATAGTTCC TTNNCAAAGT AGTAAACTTT TCTATTNNTC TACTTGCCCA GTAGAGACTC 300  
TTGATTCTGG AANATTCTNG NCAAAATAAT TTTAATAATA CACATGGTTG CTTCTAAA 359

SEQ ID NO:3888

LENGTH:359

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04612

SEQUENCE DESCRIPTION:

GATCACTTGA GGCCAGGGAGT TCAAGACCAG CCTGGGCAAC ATAGTGAGAA TGCACTCTA 60  
CAAAAAATAA AAAAAATTAG CTAGGCATAG TACCTGAGGC CAGGAGGTCC AGGCCGCAAT 120  
GAGATGTGTT TGTGCCATTG CACACCAGTC TGGGTGACAG AGAAAGACCC TGTCTCANGG 180  
GCANNTTAA TAAAATATCT TCATATATAA ATTAAGCTAA TTAAAANTAT TTTCCCTGT 240  
ATTTNTTAN TATTTCTAA TCTGAACCCA TATNCAGCTG ACTANTTCAT TCTTAGAANT 300  
GTGTTATCTG TAATCTNTCC TAAACAGTGT AGCCCACAAAG GNTCCATGGC ACTTTTAN 359

SEQ ID NO:3889

LENGTH:359

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04613

SEQUENCE DESCRIPTION:

GATCTAAAGG GGACACTGTA CTCAAGCTTT TNACCTCATG CCTTGTGTAG TAAAAAAGGA 60  
TTTGGGGTT TTGTTGGTT CCTGAGAGGG TTGTGTTTG TTTTGTTTC CTTTGTTA 120  
TGTGTTGGCC TTTCCTCTT GTCTTCCAT GTAGACCAGA TATTGAAAG GGCAGACGAT 180  
GGCTAGAGGT GTAATGTCA GCTTGTATTACCGTATTT GGGAAACTTA CCTTGGATGG 240  
GAAATCGAAT CGTGGATTCA CCAGGCCGGT GCTGGCACAC TCACCCCTCGC CCTTCCCTC 300  
CGGTCAGTA CCTATTGTT CTCCCTCAA ATATGTGATT GTACTAGCTC TTTCCATAN 359

SEQ ID NO:3890

LENGTH:358

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04614

SEQUENCE DESCRIPTION:

GATCTGATGG GCTCTAACAG TGCTTACTTG CAGCCTTGTG TCCACCACCA ACTTCTCATC 60  
ATGTTTCTCT CCGTTGCCG TTGGGTTCC AACTCTCAA NCTTCAGGGT CTGGGNCAAG 120  
GAGTGGGCC ACCATTGTG GGGAAAGTAT CATTCTCCA CCTCAGGCTT GGGTAGATTT 180  
GGAAAAANAC AAGGTNAGGA TACGCCCTGTT TGAGCTTGAG GGNATGAACCT TTGCTTTA 240  
TATTTANCTA NGGNTACTTT TATATGATGG GTGCTTTGAG TGTNATTNAG CAGGNTCTCT 300  
TNGTTCCCG AGGGNCTGC TTTGNAAGG TGACCNNGGT TACTTAAGCT AAGGNTTN 358

01256

SEQ ID NO:3891

LENGTH:356

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04615

SEQUENCE DESCRIPTION:

GATCAACCCA CATTAGAGTG TCTAAGGACT CCTGAGAATT CCTGTTACAG TAAACAAAAC 60  
TAACGTAATC TACCATTTCC TACACTATTT GAGCATGGAA ATCATAGTCC CCACTCTGTG 120  
AAAACCTAAC GCTTTTGGA AGACATTCT GTAGCATGTC AGTTGGAGA AATGNNTGNG 180  
CTACGCCTTG ATGAAAGAAC CGTGTGGTG CTGCTAAGTT TAGCCATTAT GGTTTNCC 240  
NTCTCTCTCT TAAGCCTTAT TCTTCAACTA AAAGATGAGG ATTAAGAGCA AGANGTTGGG 300  
GGNNNGATGTG AAAATAATTN TATGNGGTTG TCTAAAATAA AGAGTAGTTT CTTAAA 356

SEQ ID NO:3892

LENGTH:355

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04616

SEQUENCE DESCRIPTION:

GATCTACAAA TGTACGTTGT TACAGGGCTG CTTCTAAAG ATTTTTTTA CCTCAGGTTT 60  
CTCTTAATAT AGITCTCCAG TCAC TGACCT TGAATTGACT TACATAAATT ACTGCCAATG 120  
TTTAAATTGC CCTTATGTTT ATATTTATTA TGTCAAGCCA ATTCTGACAT ACAATTGGGA 180  
ATCAAATGTC ATAAGAATT ATTATATAAA TTTNTCAAGA ATAAAAATGC CTCTCCAGCC 240  
TTAAGTATT ACATGCTCCC AGGTCTTGT CAGTTATGG TATTATGTTG TTTTATTAA 300  
AGCATTGAAT TGATAGAAAA AATTGCTCTG TAATAAAAAT CTACTTCAC ATAAA 355

SEQ ID NO:3893

LENGTH:351

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04617

SEQUENCE DESCRIPTION:

GATCTCATTC TTNTTATGGC TGCATAGTAT TCCATGGTGT CTATGTACCA CATTNCTTN 60  
ATCCGGTCCA CCACGGTGG CATTAGGTT GATTGATGTC TTTGCTATTG TGAATGGTGC 120  
TGCATAAAC ATGCATCCAT GTGTCTTAC AGCAGAACGA TTTATATTCC TTTGGTATT 180  
TTTTTGAGT ATAGTAATAG GN>NNNNNGGG TGGAGTGGCA GTTCTGTTT AAGTTCTCTG 240  
GGAAATCACCC AAACATGCTTT CCACAGCAGA TGAACTAGTT TACACTCCCA CCAGCAGTGT 300  
ATAAGTGTTC CCTTTCTCT GCAACCTCAC CAGCATCTGT TATTTTACA N 351

SEQ ID NO:3894

LENGTH:350

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04618

SEQUENCE DESCRIPTION:

GATCTTCTTG TAAGCACATC CAGAGTGAGA CTTTCTATG TTTGAAAGAA GAATGTGTGT 60  
 ACATTTCAAG AATTTGGTT TTTGGAGGG AGGAGGAACG GTTACGTT TTCCCTCCACA 120  
 CGTTTGATT TTGACACATA CACCCCTAAT TCCTCAACAG CAGACCTCCT GCAGCCACCA 180  
 GGGGCCAGCT CTGTGTAGGA ACCAGATGGT CTTTTCCAA GCNGCATCTT CAGCTGCCAG 240  
 CTAAAATCCA ACCCCAGNCA GGGAGGGGCA GGCTCAAGTC TTNCAGAATC ACACAGGGC 300  
 AACACATGCA NNNNCAGGNA CCTGTNCTGT ACNGTCTNGG TTTNTTCNTN 350

SEQ ID NO:3895

LENGTH:348

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04619

SEQUENCE DESCRIPTION:

GATCCATAGG AGGGTAAAT GTCCGTTTC TTCATTAAAAA CTTCTCAGCT CAAATTATA 60  
 CTAAGCATA TCCAGGAATT AAAAAGGTTTGTGA TATTTGCCTT CTAGTTAAT 120  
 AAGTTTAAT ACTGAATAGG TTAAATTAAT ACAAAATAAC ATAAAATGCT AATATTATT 180  
 GAGTATTAC TTGTGTACCC ACTACGNNTT TAAGTAATT ACTGGGATTA TTTTATTTA 240  
 GTTTAACAT GCAGGTAGCT ACTATAATCG TCCNGGTTT ACACTTGAGG AAACAGGCTA 300  
 AGAGAGATTA ANTTAGTGGC CCAAGGTCAG AAAGCTCGTA ATTCTTGN 348

SEQ ID NO:3896

LENGTH:347

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04620

SEQUENCE DESCRIPTION:

GATCCCAAAT ACTGCCATTG TGTGTCTAC TTATGAGTTA ATTGTGTACC TGTTAGAAGA 60  
 CCGTACTCAG TAACAGGCCG GAAAATTGTG CTCTAGAAGA ATAAAACGTA AAAACTCTAG 120  
 AGAATTTTT TTCCCCATTG ATGTTTAGAA AGTTTGAGAC TGAAACAGGA AAGGCCATAA 180  
 AATATCTGGT TCATATCACC TGTGGACAT TCCCTTTGG ATTATGCTT TCTGGAAGGT 240  
 TTAAATTCAAT TAACGTTAAT AGTTAATTAT AACTNTTTNT TTAACTTAAG AGGATTCAAG 300  
 GTTAAGCACC AACTAAATTA AATCATGCTA TTTAATTAN GTATAAA 347

SEQ ID NO:3897

LENGTH:345

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04621

SEQUENCE DESCRIPTION:

GATCTAGAAT CTNTNCTNGG NTAAGCATAAT AGGATGCCAC TTCTTGCTAC CTCCACAGCA 60  
 ATACATCACC TGGACAGCTT GCCACTCTT GTTGCCTGA ACTTCTCTGA TGTTAGGCA 120  
 GCCCATTCTG GTACTGAGAA CACAGTGAAT GAGCTACATC CTCCTGCTT CTTCTCTAT 180  
 TATNACTTTT ACCTGATTTC TTCTCAGGAG GAAGCTGTAC ATTTAACAG GACAGATAGG 240  
 AGGAAAAGCA ACTATTTTC TGCCGAGATA ACAATTGACA ACTTGGGGCA GTATGTGCAG 300  
 AGTTTCTCTG GAGTTGTATT AAAAATTATC TGATAAGCTG CCAA 345

2153480

SEQ ID NO:3898

LENGTH:342

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04623

SEQUENCE DESCRIPTION:

GATCAGTGTA CTGTTACCCG GACATACTA TTCCCTTCACA AGTCTGGTT CTTCACTGCT 60  
GCTTACTATT TTGGTAACTG GGCCTTCTT GGGGTATTT TGATTGGATT AATTGTATCC 120  
TGTTGTAAAG GGAAGAAATC GGTTATTGAA GGAGTAGATG AAGATTCAAGA CATAAGTGAT 180  
GATGAGCCCT CTGTCTATTG TGCTTGACAG CCTTCTGTCT TAAAGGTTT ATAATGCTGA 240  
CTGAATATCT GTNATGCATT TTTAAAGTAT TAAACTAACAA TTAGGATTG CTAACNAGCT 300  
TTCATCAAAA ATGGGAGCAT GGCTATAAGG CCAGCGATAT TN 342

SEQ ID NO:3899

LENGTH:410

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04624

SEQUENCE DESCRIPTION:

GATCTGGTC CCCTCTTCTC CTGGATTACAC ATCCCCACCC AGGGCCCGCT TTTACTAAGT 60  
GTTCTGCCCT AGATTGGTTC AAGGAGGTCA TCCAACGTGAC TTTATCAAGT GGAATTGGGA 120  
TATATTTGAT ATACTTCTGC CTAAACAACAT GGAAAAGGGT TTTNTTTCC CTGCAAGCTA 180  
CATCCTACTG CTTTGAACCTT CCAAGTATGT CTAGTCACCT TTTAAATGT AAACATTTTC 240  
AGAAAAAATGA GGATTGCCTT CCTGTATGC GCTTTTACC TTGACTACCT GAATTGCAAG 300  
GGNTTTTNAT ATATTCAATA TGTTACAAAG TCAGCANCCT CTCCTGATTG GTTCAATNAT 360  
TGAATGTGCT GGNAATTNA AGGTCGGTTN NANTTTAAAN CAAGGNTNCN 410

SEQ ID NO:3900

LENGTH:338

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04625

SEQUENCE DESCRIPTION:

GATCAAGATA TAGAGCATCT CCATTATCAA AGTTCTTCA TGCTCCTTCC CAGCCAGCAA 60  
TTCTNCTTAC TGTCTGCTG ACTCCTGTT TCACCTTCAT CACCATCAGC TCATTNGCT 120  
TGTNCTTGAC TCATAAACAG AATCATATAG TAGGTGGTTC GTTCAATGTA GGCAGTCTGT 180  
TTTNGCTTA ATCATTACAT GAGTATACAT CCATATNGTG TGAAGCAGTA GTTCTTNGC 240  
ATTGCTGTGT AATATTCCAT TGTATAATTG TATAAATATA TGTGGTATAA ATGTAAGTAT 300  
AGCACANTG ATTCTTATN GGGCCACTG GTTTATTN 338

SEQ ID NO:3901

LENGTH:238

TYPE:nucleic acid

TOPOLOGY:linear

01259

2153480

CLONE:HUMGS04626

SEQUENCE DESCRIPTION:

GATCCACTGG TAAAGGGCAT CCCAGAGGNC AAAAATCCCT TCAAGGAGCT CAAAGGAGGC 60  
TGTGTGATT CATAATACAA ACAAAAAGAA AAAAATTAN ACAATTCTT GGAAATATCT 120  
CAAATGTAA TAACAATATG ANTNTTCTC ATGCATACTA TTACTACTAA GCATGTACGT 180  
GANTTTTAA ATGTATAGAT GTAAACTTTT ANTAANNTT GGGGTGTGGT AACCCAAA 238

SEQ ID NO:3902

LENGTH:331

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04627

SEQUENCE DESCRIPTION:

GATCTCTATA AGTTATTAAT TTAACCTGAA ACCAAAGTGG TCTCCATTTA AAGTTACTTA 60  
ATCCCTTTGT ACCACCTATT TCTAGTTAAA TATATGTNGC TANNCAAATA GGTAAAGTGC 120  
TTCCTTGCCA TGATGGAAT GGATTGGAAC TATGAAGGCT CTCAGTGTAT TGGCTCTGT 180  
AAAGATGAGG CGTCTCTCA GAANCCNAA CTTTCACAT TTCTGCTTAC TAGACCTGGG 240  
TTGATGTACA TGGTAAGTCT CAAACAGATG CAAGCTATGT GCAAAANGGA ACTTAGCCA 300  
AATGGAAATA GCTGGATGCT TTGNGAATTG N 331

SEQ ID NO:3903

LENGTH:67

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04628

SEQUENCE DESCRIPTION:

GATCCAAACT GTGTTGTTCT TAAATCAAAA ATTGGNTAAT TTTAATATN TATGTATTA 60  
TCACAAA 67

SEQ ID NO:3904

LENGTH:327

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04629

SEQUENCE DESCRIPTION:

GATCTGCCGG AGTCTTGAAA TTCAGCTGAT TGGAAAGTGGT TTCTTGACT TTCAAGGTCA 60  
TTCCTATCA GTTACTACTA AGAGTTCTCT TACTGTAGA ATCTCTCTG CAGTACAGCT 120  
CAAATAGTG GATGCATTTC AAACTTGACC ACCTTTCTC ACCAGCTAGT TAGAAGTCAT 180  
CAATATTCT CTACATTNG TTTATCTGTA AGTCCTTAA ATCTATTTN GCTAGGCATT 240  
CATTATGATT AATAGTAGAC TTTAAGACA ACATTTNTGT CACTCCCCAC CTCCTCATAT 300  
TTNATAAAGG AGATATTTAC CTTGAAA 327

SEQ ID NO:3905

LENGTH:326

TYPE:nucleic acid

01260

TOPOLOGY: linear

CLONE:HUMGS04630

## SEQUENCE DESCRIPTION:

GATCAAAGAC CAAAACATT TCTTAAATAT ATTTTATGTA ATATTTATT TGTATACAGT 60  
 GTTGTGATG AAATATTTAA CTAGAGCATG ATATTTAAA TGTTAAGGTG TAACATATGT 120  
 TAAATAAAC TGTTATTTN GAATTTAAA ATTNNGTTT NGGGGGTATG ANCTACTAGA 180  
 GTTTAAATT CTGCCAACT ATTACTATA TGTNCTATTG TGTAACATAC TTNCTNGAAA 240  
 TATTNGTT TATAGAATTG ANGGTCTTA TCAGATGGGA TACTGGGAC TATAAACAAAT 300  
 GGAAATAAAAG CCACTGTATT TNTAAA

326

SEQ ID NO:3906

LENGTH:325

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04631

## SEQUENCE DESCRIPTION:

GATCTAATT AAGCTAAATTT TGGTGCACAG CAGGTTGTAC ATGATTCAT GTTTATGTAG 60  
 CAAAATGCAT TGAAATGTAT TAGTGTGAA ACATACATGT AAAGGTAGTT GTGGAAATTG 120  
 TTATATTTNC CTTGTGTGTC ATTATTTAG AGCATAAAAGG TTTTTTTAT TCAGCCNNNC 180  
 TGAATAAGGC TAAATGAATA CTGTAATTGA AAATATATTN NAAATCTTTG TCATGAGTTT 240  
 TTTTAAAAAA ANCTATTGCA AATTGTATCA TTCCTGATTA CACAGAACTT TGTGGGTGGT 300  
 TTAAANTAAN TNTNNTACTT CTAAA

325

SEQ ID NO:3907

LENGTH:324

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04632

## SEQUENCE DESCRIPTION:

GATCTGGCCC GAGCTCTCCT CAGACCTCCC CAGACCTGTC TTCTCATCAG CCACCGCTGT 60  
 TTCTTTTGC CGAACGATGG TTGCATCTCT CGGACACAGT GTACCCCCTC CCAAGCCCTC 120  
 CCTGAGCCGT TCTCCTGAGT CCCTGAGGGC AGACACAGCT CCAGGGACCC AGGCCGGCTG 180  
 CCACACCCNC GACACTNCTG NTGTCCTACTG GCCTTAGCTC CTGCAAGTTC CCCAGTGTCC 240  
 GCACCTGTTC CNTTCCCTGA CCTTACCTTN CTGGGGTCTG TGACTGACTG GAGATAAAAN 300  
 TAAAAGCAAT TGTGACANCT GAAA

324

SEQ ID NO:3908

LENGTH:319

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04633

## SEQUENCE DESCRIPTION:

GATCAAATAC CGAAATTGAA CTTCTAAAAA CCTACACATA GCATGCGTT AAATTCTATT 60  
 ATATAAAGCC CCAAGTGCTT TACCTTCTAA AACATGCTTC TCTATAGGTG CAAAGTTATA 120  
 AGATATGTAG AAGAAAACAT CCATCAGAAT CTNCTGGAGA NTATGGTCAG AGTCTTAAAC 180

AGGCCCACTG CTGACTNCTT TGTCCACTTA GTCACACATC TTTGTGGGA ATGGGAAAGG 240  
 AAGGAGACAG CCAAACCTCG ACAANGCTT TTCCTTATAG ATTAACCAA AGCCTAGGTG 300  
 AGGGTTGATA TATTAATGN

319

SEQ ID NO:3909

LENGTH:317

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04634

## SEQUENCE DESCRIPTION:

GATCTGAGCA AAATGTGAAC TCAGTATGTT TACTATTGCT CTTACTTGAA AACTTTTTT 60  
 CAAAAAAAGC ACAAAATAAA GTAGTAAATT CATATCCATA GATAGTTCAT TCATTCACAA 120  
 AATATTTACC AAGTTCTAA TATAAGTGAA GGNCCACTTC TCAGATTACT AAGTCATTTG 180  
 TATGAATATG TGTGGCAGTG AAGAGAACAG GTCTTCAAA AAGCATTGA TTATCTTAT 240  
 TTNTTTAAA TACACTCTCT NATNTTNCTA CTTGTTTTT TGTAAATCAT AGCAGGATAT 300  
 GACAACCTTT ATTGAGAN

317

SEQ ID NO:3910

LENGTH:317

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04635

## SEQUENCE DESCRIPTION:

GATCTACTCA GATGTCATNA TACTCCATAC CTGCTTTCC CATGGCCGCC CTACGGAAAA 60  
 TCCCACATCCAC AGAGGCCAGG GCTACCCAAG NCCCTCCAGG TGAGCTGGGC CTTTCCCTTA 120  
 TGAACCTCCA TCCTCCCAGC CAGCTACAGT AGGGCCTCCT CACCCCGTAC CCCACAGCTA 180  
 GACAGTGTCA GCACTCATCT CCTCCTCCCCA CATTNTGGA GCTTTTTTT TCCTCCNCA 240  
 TTGACCTTTG TGGCTCTCTG TGATTATTAA TGCTGCCTCC NAAGGATAGA ATTGAAATAA 300  
 AATGTTTCA ACTTAAA

317

SEQ ID NO:3911

LENGTH:316

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04636

## SEQUENCE DESCRIPTION:

GATCAAAGGT TCTTCATTCA AAAAGAAGCA ATATCCTTT GCCTGATATG GGGTGGGAAG 60  
 GGTAGGTGGC GATGATATT CAATGAATT AGAAACCACC TCCCATTGAA TGATAGCTGG 120  
 AGAAATGGAC TGACCTAGAA GTTACAGGAC CAGAAACTAC AGTCACCACT AACCTTTCTA 180  
 CGTGGCACCC AGCCCCACTT GGAGACATTA TTTTCCATC AAACACAACC GTACTGCACA 240  
 GACATCTCA CTGTCTGTTG CAAAGATTGG AATACGTAGA TTTCTGTCA AAATTAATAA 300  
 ATATTTAAA TACAAA

316

SEQ ID NO:3912

LENGTH:316

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04637

SEQUENCE DESCRIPTION:

GATCCACTGG TAAAGGGCAT CCCAGAGGAC AAAAATCCCT TCAAGGAGCT CAAAGGAGGC 60  
 TGTGTGATT CATAATACAA ACAAAAAGAA AAAAANTAA ACAATTCTT GGAAATATCT 120  
 CAAATGTAA TAACANTATG ATTTTTNTC ATGCATACTA TTACTACTAA GCATGTACGT 180  
 GANTTTTAA ATGTATAGNT GTAAACTTT AATAAAANTN GGGGTGTGGT AACCCNGNGG 240  
 GNCTATGTT TNNTAACAT AGCTGGCACA GGGTTAACAA CATAATNGCC ATAANTATTG 300  
 CTTAAGGTNC TTTAAA

316

SEQ ID NO:3913

LENGTH:313

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04638

SEQUENCE DESCRIPTION:

GATCCACCTG CCTTGGCTC CCAAAGTGCT GGGATTACAG GTGTGAGCCA CTGTGCCCGG 60  
 CCAAACCATT TTTGTTAAC TTCATTCTA CATGGTCGTC AAACGTGCCT ATCCAATGAA 120  
 GCCTTCATAG AAGGCCAAG AAGACAGAGT TTGGGGAGCT TCTGGATAGC GGANATGTGG 180  
 AGGTTCCAGG AGGGCAGGGT GCCCAGGAAG GGCAATGAAAG CTCCGTGTCC CTTCCCCATA 240  
 CCTTGCCTA TGCAATTCTT CATCTGTATC TATTGTGATA TCCTTNACAA TTAAACTGGT 300  
 AACATANAT AAA

313

SEQ ID NO:3914

LENGTH:312

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04639

SEQUENCE DESCRIPTION:

GATCACCAAGC TCACGTCACTG TTGCCTTCTC TTTCTTTGT GTGTGTGTTT ATTAAGTNA 60  
 TTTTCTTCC TCCTCTCCCT TTTCTTTTG GCCCTCCCTC CCTCCCTCN CTGCCATGTA 120  
 ACTGGAGGAT GTGCTATGAG TTTGCAAACA GCTGGACTGT CAGGCTGCTT TTTTCCAGA 180  
 TGTTCTCTCT CTGCCTCCCC TTCCCCCTCT CTCCCCCTCTT TTCCCTTCTC TCCTTCTTT 240  
 CCTTGGAGCA CTGAGCACCA TTGGAAGCT TGAGAGAAC CAAAATAAA GAGAGAAAGA 300  
 GAGAGCGTGA AA

312

SEQ ID NO:3915

LENGTH:311

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04640

SEQUENCE DESCRIPTION:

GATCTAGAGG AAGTACAGCC ACCCACTGAC ATCTGANTTT ATATACTNT TGAGTTTG 60  
 GTGCACCCAA ACACTCGATA AACCAAGGTGA AGAAATTTAG CTTCCATGTT CTACTTCAGC 120

TAAAACAGCT ACATACAACC TAGTACCCCTT GANGTCAGAC AGACATTCA GTTGCTTACC 180  
 TCCAGTACTG AGCCTGCTT TGCGAAACTA AAAGATTTAG ACCAAGTCAC TGCCAGTTT 240  
 NGCCTTNGTN GCATTNGTA CAGTTTTAT ATNTNGGATA TCTTGTAAAT AAAGACAGCC 300  
 AGCTTTCAA A 311

SEQ ID NO:3916

LENGTH:308

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04641

SEQUENCE DESCRIPTION:

GATCAAATCT AAAATAAGTA TAATGCATTG TAATTCCAGA GATAAATCCT AGACCCTCT 60  
 TGGCCTCCTT CTNACATAAT TCTAATCCTA CAGTCTCAGA GATGCTGTTG TATCCTGCC 120  
 CCCAACCCCA TGATAGTNAT AGTGGTTTT GCCTTGAAGG AATTGCTTG TATTTAGCTT 180  
 TTCCCCCTCT AGATTCTAG TTCTTTCA GTATTGGATT GGATTGAGA TTTGATTAAC 240  
 CTAGTACTCA GGTTCAGATG CTCGCCTCTT TGCAATTAAAC AACTCATTC GACAATAAAG 300  
 TCAGTNGN 308

SEQ ID NO:3917

LENGTH:306

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04642

SEQUENCE DESCRIPTION:

GATCTAATGC ATCCTATATC CAGTAAGTAG AATTATCTCT TCATCTGGGA CCTGGAAATC 60  
 CTGAAATAAA AAAGGATAAT GCAATAAACAGTTGCAGG AAAGTATGTT AGCTATATAC 120  
 TATGAAGTAC TCTTAGTTA CTTATGTTGA ATGGCTTAGC TATTAATACT CAAATTGAGT 180  
 TAAAATGAAA ATTCCCTCCTT AAAAAATCAA ACGTAATATG TATTACATTT CATGGTACAT 240  
 TAGTAGTTCT TTGTATATTG AATAAATACT AAATCACCTA GGTGTCTATG TTCTATCACA 300  
 TCTAAA 306

SEQ ID NO:3918

LENGTH:306

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04643

SEQUENCE DESCRIPTION:

GATCAGCTGC AGCAGGNTGG GTCCCTCTGC ATCTGTCCAT CACTGCGACT GATGGCAATG 60  
 ACTGAGTATA ACACCTTCT TCATGGTCAA CTCTACCCAG GAACCACGTA GGGAGGAAA 120  
 TTCTGGAAAA CAGCTCCAG CCTTAGCCAA CTTGACATAT CATAATCCAA CAGANCTCAA 180  
 CCTCTACCAA CTTGGAAATC ATGTACATTT GTCAGGACTG TATTTAATT CCACATAGAG 240  
 AGAAAGCAAA ATTATACTTT TGACCAAATC AATAGANTTA TCCATTAAAC ANACAAAATC 300  
 GTGAAA 306

SEQ ID NO:3919

LENGTH:306

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04644

## SEQUENCE DESCRIPTION:

GATCCTCCCA GCTCTGCTC CCAAAGTTCT GGGATTACAG GCATGAGCTA CTNTGCACAA 60  
 GCTAAGAATA TGTGCTTTA AATCCCATAA GGAAAAAAAT ATTTTGGTA AATAAAAATTA 120  
 AAGCATAAAT ATCATGATT ACCTGACGTT TACCGTAAGC AACATAAAAG ATATGTGATA 180  
 CTGAATGACT AAAANGTAGT TTTGGTTAAA GAGAGTTCTA GTTCCATGA GGNCTCTGAC 240  
 AATGCTGCAT TTTATTTNC TTTTAATGT GCACATTGGT ACANGTTAA CTACTCTACT 300  
 CCTGTN 306

SEQ ID NO:3920

LENGTH:304

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04645

## SEQUENCE DESCRIPTION:

GATCCTGTTA TGAAAAGCCC TAAAAAAATAG GGTATAGAGT TTGGGCATAT TTCAGAGGTA 60  
 ATAAGAAAAGC ATTCTGCATT TTTAAAGTAA GGTTAAAAAA TGTTTCTAAT TAGNGATACA 120  
 GCAAAGTTGG TGTGAGAGGA TAAAGCTGAT ATACATAATC TGAGGGAGTC ATGAAAATTC 180  
 ATGTAAANCT GTAGTATGAA TTGGCCTAGG NGCAGCAGCT NAGGGCATAG NGACTTTAAG 240  
 ACTTTCCAAG GAGAGTGNAG GCTGGNGATA AATTGTGACT AAAATATATT TTGTGTTGN 300  
 GAAA 304

SEQ ID NO:3921

LENGTH:301

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04646

## SEQUENCE DESCRIPTION:

GATCAAGTAA TTCTTTCACT AGGTTGGTT TGGGGAGGGG GGAAAAGAGG GGCTTTCCCT 60  
 AGGAGAACGA TAAGAAATGG AAAGACTCCT TGAAGTGTG TGAGGGAAACC TCCTAGCACT 120  
 GTGAAAGTCA GAATCGCTC AGCATTCCA TGACGCACAT TATGCAAATC TNNTTAGCAC 180  
 TATTTTAAGT TTGAAAACCT TAACAATGAA GGGGAAGGGG AAGNTTTCCA CCAACTGANT 240  
 CATTTGTGCA CGTGTATAGC TCAAAGNGCT TAGACTTCAA ATATATCTGG TGAATGACAA 300  
 A 301

SEQ ID NO:3922

LENGTH:301

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04647

## SEQUENCE DESCRIPTION:

GATCTGCCTG CCTCAGCCTC CCAAAGTGCT GAGATTAGAG ACGTAAGCCA CCATGCGTGG 60

2153480

CCAATAAGAC TGACTTTAA TTTCCCTTC TTGTACTGTT CTTGTCTGT TTTGGTATCA 120  
AGGTTATATT AGCCTCATAA AAGGAGTTAA GAAGTGNTCG CTCTTCTAT TTTCTGAAGG 180  
AGTCTGCTAA GTATGAGAAC TCTCTATTTC ATGAATGATT GATAAAACTC TCTTGGAAAC 240  
TGTCTAGACC TTATGAAAT ATTCAGTAA TAGTTACAAA GCTATTCAAG TTGTCTGGTT 300  
N 301

SEQ ID NO:3923

LENGTH:299

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04648

SEQUENCE DESCRIPTION:

GATCTCAGTT GGATAGTTGT ACCTCAAAAA AGTAGGTGAG AACTGGCTTC CTCATTGTCC 60  
CAGGATGTCA AATACTAATG ACATAAGAGC TCACCTACGT GCCAAAATTC ACTTTATAC 120  
TAGTTTTCA GTGCTTAAT ATTGTAACT NAAATTNAA AACTCGTATT TACAAACACT 180  
ACTGTAACTN CAGTGAAACT GAATTGTGCG ATTGANGCTT TTTGCTTATC ATAGTATNTA 240  
TTACACTACT TANTTCAGTA AATATATAAA NGTAGCCTNC AATTGANGTG TNTATTGAN 299

SEQ ID NO:3924

LENGTH:293

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04649

SEQUENCE DESCRIPTION:

GATCAGAAAG GTGAAATGTT TCGAATTAA AATGTTTAA GCATGTTGG TTTTATTATT 60  
TTTACATAAT TGTTCACAC TAGTTTTCC ACTAGCTTT TATTATATAT GTTTAATTAT 120  
GTAATTGTTA TTCACTAGCT TTTATTATAT AATTCTTTT AAATAACT ACTATTATC 180  
AACTCTTG TGACAGAAAT TGCAGTTTT TCTACCAAAC TTTTACTTCA TCTATGAGTC 240  
GTGTTAGAAA TAGTCATTGA AAAAATATAC AGTAAAATAT CTAGCAAAAT AAA 293

SEQ ID NO:3925

LENGTH:293

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04650

SEQUENCE DESCRIPTION:

GATCTGGTGA AGGCCTNCTG GCAGCATCTT CTCAGTAAGA CCTCATGTGG CAGAAGGAAA 60  
GGGAGCTATC TGGAAATCTCC CTTATAAGGG CCCNNNNGCC ATTCTATAAGG GCTGCACCC 120  
CATGACCTAA TCACCTCCA AAGGCACAC CTCCTGGTAC TGTCACCTG GGCACACGA 180  
TTTCATCATA TGAATTGG GACGGCATAT TCAGTCCACA CCAGGAAGTT CTTGCACNTC 240  
ATAGTCGAAA GTCAGTTTG TGGCTATAAA AATCTTGGTT CCATTTCCG CTN 293

SEQ ID NO:3926

LENGTH:292

TYPE:nucleic acid

01266

TOPOLOGY: linear

CLONE:HUMGS04651

SEQUENCE DESCRIPTION:

GATCCACCCG TCGTCGCCTC CCAAAGTGCT GGAATTACAG GCGTGACATG CATGCCGGC 60  
 CAACATATAA TTATTATACA ACCCAGCCAC TGCACCTCTTGG GCATTTATT CTAGAGAAC 120  
 AAAAACTAT CCCCACTCAA AAGCATGTAC GTGAATGTTT TTAGCAGTTT ATTTATAAT 180  
 GGTCAATATC TGAAACAAAT CCAAATGTCC TTCCATGAGT TAATGGTTAA AATAACTGTG 240  
 GTGCACCCAT ACCATGGAAT ACTGTTCAAGC AATAAAATGG TATGAAATGA AA 292

SEQ ID NO:3927

LENGTH:291

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04652

SEQUENCE DESCRIPTION:

GATCCTATCT AAAAATATGT AGTTATTAAA CATTCTGTGG ATATTTGNA ATAAGGTAGT 60  
 TNCTATGGTC CGAATATCTG GGCTGCCCC CCCAAATNAT GCTGAAACCT AATCACCACT 120  
 GTGATGGTAA TAGGAGGTGG GACTGAGCTC TGATGAATGA GATTAGTGCC CTTATAAATT 180  
 ATGACCAAAA GAGCTCTTCA CTCCCTCTAC CATTGAGGA TACAGTGAGA AGCCTCATC 240  
 TATGAACCAC AAAGTAGCCC TCATCAGACA CTGAATCAGC CAGTGCCTTG N 291

SEQ ID NO:3928

LENGTH:290

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04653

SEQUENCE DESCRIPTION:

GATCTCACAG AAGTTATTCA ATCTCTAGGT TGCTTTAGCA TCTACTTGTG TAGTGAGAAG 60  
 AGTTATTAC TTATATTGTG CATGAGGCCG TTTAGATATG TTAAATGCAA AACAGAACTC 120  
 TTGCTAGCTA AACACAGTAG AACTTGAATT TTTTTTTNA GAGGTTATTT AATANCAAAA 180  
 TCAGGTTATT TGTGACTTGG TTGAAGTAA CGGTGTCTCA GATAAANTAA TTNGTTAAAA 240  
 GAGTTGCCCA NTTTATGTCT TATANCTTNA ANCAANTANN TANTAATAAN 290

SEQ ID NO:3929

LENGTH:287

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04654

SEQUENCE DESCRIPTION:

GATCTGGGAT GTGAGTGTAT CAAATCTTAT CAAATCCATT GACAAATCAG TGGTGCTATA 60  
 CTGGAAATGG CTACTCCTT GGATGAAGGA CCTCATTTCC CAGTTGCTTG GAACAAANGA 120  
 GAATTTACAT NNNNCTGTA GAAGGGAGAG ACGGCAGTTG TTGGTAGACA CACAGNNAAG 180  
 GGTGCCCAAG AATAATTCTG TCTGGATTAA AGGTCCCAGG GAAGTGACGG NGCCATTCT 240  
 GTACCAAGAG GTGAATATAA TTTGCAATGTT NGNGTGCAGT AATTAAA 287

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SEQ ID NO:3930

LENGTH:290

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04655

SEQUENCE DESCRIPTION:

GATCCCAAGA TGACTGGGT GGGAGGTCTT CCTAGAACGGTAC AGAAAGGGCC 60  
TTGACATCAG TTCTTGTG TGTACTCACT GAAGCCTGCN TTGGTCCAGA GCGGAGGCTG 120  
TGTGCCTGGG GGAGTTTCC TCTATACATC TCTCCCAAC CCTAGGTTC CTGTTCTCC 180  
TCCAGCTCA CCAGAGCAAC CTCTCACTCC CCATGCCACG TTCCACAGTT GCCACCACCT 240  
CTGTGGCATT GAAATGAGCA CCTCCATTAA AGTCTGAATC AGTGCAGAAA 290

SEQ ID NO:3931

LENGTH:287

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04656

SEQUENCE DESCRIPTION:

GATCCTGAAG GGAAGGGCA GGGATTCTC CTTCTCTTG GTCTGGCTC CCAAGGGCTT 60  
CTGTCTCAT CTCTGCATGA GCTCTCCTTC CCAGAGACCA ACTCTTTTN ATTNATTN 120  
ATTNATTNT TNAATTATG TCTGGACCT GGCTACTCTG CATTGGGNT TGGGGATGCT 180  
GGGTGGGTGT GTGGTCCATG TTCAGCGTTC TAGCAACACG TGTGTGTG TGTGTGAAA 240  
GGCTATGCAG CCAAAATACC ATCTGCCAG ACGGGCCAC CCACAAA 287

SEQ ID NO:3932

LENGTH:286

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04657

SEQUENCE DESCRIPTION:

GATCACCTGT TCCTACAGTG ACAACTGGAC CTGGCCGAA CCCCTGGCAT CTGGCAACAT 60  
TATTACCTGT CGAAACAGAA GTAGAGATT GAAATAGAGG ATGCCAGTC CCATTTCCTC 120  
CTGCTGTCTG GAAGGAAGTC TGGCTTCCA GCCCAACTCT AAGCTCATCT TTACATACAA 180  
AATAAGGGTA TGTTTACATG GAAAGCAAAA ATAGAACCAT GGATTACAG AAGGTTCCAT 240  
AGCAGCAAAT ANCAGTGCTT ATGAAATAAA CATTAAAT ATTAAA 286

SEQ ID NO:3933

LENGTH:283

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04658

SEQUENCE DESCRIPTION:

GATCTAATTG TGAAATCGTT CACCTTGTAA AACATCTAAG TAAGTCTGTA GTCGCTCTGC 60  
AACACAGCCAT TATATTATT TACTCTAGAA GAAACTGTAG AGTAGTAATT CGTGCTAATG 120  
AGAAAAACAA AATACCATGT TCAAAACAGA TGTATTTGAA AACTTAATGA CATGGTCCA 180

01268

2153480

AAAACTAGAG CATGTATGTA TGCTGTGCAT CATCTCAGCA GACCTAAAAT ATCCCCAAGT 240  
TGTCCCTTA CAGCCATCAA TATATTTNAC ACTCTGCGGC AAA 283

SEQ ID NO:3934

LENGTH:283

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04659

SEQUENCE DESCRIPTION:

GATCTGAGTC CTAGGNNCGC CCTCATTACAC TAGCAGTAAG AATTTAAGTG GTGCATGGCA 60  
CATAGCACTG TACTAGATTG TGCAAGGGCA CAAACATAGA GCCAACACT CTCCCTCTTG 120  
GAGAATTCA GACCCAGAAA AGGCCACGCA GTTCTAACTT TTGTCATCGG TTCCTTTGC 180  
TAAAAGGCAA AGGGTATGTT CCTTGCCTAT TGTCCAACAT ACCCCTTCCA AGATTGTGAG 240  
AAGATGGGTA GCTGGGCATC ATAAATATT GAATCAATTG AAA 283

SEQ ID NO:3935

LENGTH:281

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04660

SEQUENCE DESCRIPTION:

GATCCACAGC TTGCAGGGAGA AAGTCAGTGG CCCCAGACAC ACGTAACAGG GTGAGCACTG 60  
AAATAAGAGC ACGCTGGGGC GTCCACACCA AGGGACTACG CCCCAGTCTG CCCACCTATC 120  
TTTCTCCAT CATTAAACCA GCGCTTTTC TCCCTGGACT TCCAAGTACC AATGACCTTG 180  
GGGCTTCTTT GCAGTTAAA GGGAAAATGC TCTACAAANT AATTCACTN TCAACANNT 240  
CAGCAGAAGA ATAAAATNTT TTTCTGGNA TATCTAGTAA A 281

SEQ ID NO:3936

LENGTH:280

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04661

SEQUENCE DESCRIPTION:

GATCCAATCA CATGGCAAAT GCCTCCTTTC ACAATAGAGC ATGGTGCTGT TTCCCTCACTT 60  
GANCTGAAAC TTCATAGAAG ACCAGGTGAG ACCACAGAAAT ACTAGATGNN AATGTTCATG 120  
TAGGTAAGCT TTATATTTC TTCCAAGCTC CATTGCTACA AAGGTGTAAG TAAAATACAT 180  
TTTATGAGT TGAAGTAAC TCACTGGTACA AAATAATAAC TCTGCCTCA AAAGCAAATA 240  
ATGGTTCTT TGTTAACCAA TAAAGCATAA GANAATGAAA 280

SEQ ID NO:3937

LENGTH:278

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04662

SEQUENCE DESCRIPTION:

01269

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GATCTTAAA TTTTGTCC TAGTTAAGTT CTGTATTTAG TGAATTAATT GCATCCTAAA 60  
AAGTCAAACT TGAAAAGCAC ATTTAAATG GCAAATCTAT TTTTACATG TTTGTGAAGT 120  
TTTTATTAGTT TAGAACAG ACCATCAGAA GAGAACAAATG GTACAGAGCA GGGGTCAGCA 180  
GATGGATTT GTANNGCATC AACTTGAAA TATTTCAAG TTTATTAGCT GTATGGCTCT 240  
GGTTTCTGTT CCCTGTTCCA AATGTTAAAG TCTACTGN 278

SEQ ID NO:3938

LENGTH:301

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04663

SEQUENCE DESCRIPTION:

GATCGACATT TAAAAATGA GGTGAAAGAA AGCTATAGTG GCATAGAAAA AGTATAAAGC 60  
TCAGTTAGTT TTTTATTAT TATTATTATT AAAAGTTAAT TCAGGACTGA TGTGACCTAC 120  
CAGATTCAG AACATGTGTT AATAGTATAT ATGCCACTGA AAACCTAGGT CCTGTATCAT 180  
ACTTTTNCT TTAAGACTTT TTAAGAAATA TTACTTAAAC ATGTGGCTTG CTCAGTGT 240  
AATTGCAAGT TTTCAATCTT GGACTTGAA AACAGGAGTA AACGTTAGTA TTCGTGTGAA 300  
A 301

SEQ ID NO:3939

LENGTH:276

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04664

SEQUENCE DESCRIPTION:

GATCTCCCTT TTACAGATAT CAGAAAGCAT GAAAAAAATA GAATTGGATT TAATGCTTG 60  
CAGATATTCT GTTTTTTTC CCAATTATTT GATTCACCT ATATACATAT TCTTTNNCT 120  
TTTCCTAGC TTAGAACAGCA AACCAACAAA AGCAGTTGG ACTTTAGTAA CTTTTTTA 180  
CAGCAGCATT TAGAACAGTT TGCAATGTTCT GAGGAATATT ATATGTGTGT TGGGGGAAA 240  
GGAATTCACTA CTGAATAAT TTTAGAAATA ATTAAA 276

SEQ ID NO:3940

LENGTH:277

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04665

SEQUENCE DESCRIPTION:

GATCTTACTG CAAAGGAAAC TGACAGAAGA AAAAGAAAGT GCTTTGAAT TTNTTCCTC 60  
TGCCTGACTA GACAATGATG TTACTAAATG CTTCAAAGCT GAAGAATCTA AATGTCGTCT 120  
TTGACTCAAG TACCAAATAA TAATAATGCT ATACTTAAAT TACTTGAA AAACAACACA 180  
TTTAAAGAT TACGTGCTTC TTGGTACAGG TTTGTGAATG ACAGTTTATC GTCATGCTGT 240  
TAGTGTGCAT TCTAAATAAA TATATATTCA AATGAAA 277

SEQ ID NO:3941

LENGTH:279

01270

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04666

SEQUENCE DESCRIPTION:

GATCCTAAGC CATAAACAGG CTAATTGCC ACCACTCCCA GGAATATTGA AATAGCTACA 60  
 TGACCATAAT GTGTTAAAA TGTGGTATGC TCTTGAGATA TTTAAAGTTT TGGCAGTAAA 120  
 ATACTCTGTT TTTAAGTATG AATGTATTTC ATTCAATATT CCTCTCACAA AGGAAAATGA 180  
 CTTCAGTATA GATTGTTTT TATTAAGATG CATTTTAT TCTTAAGTGG TAGGAAGCAA 240  
 CATCCAAAAN TGCTTAATAA AATGCTTTA AGCTGCAA 279

SEQ ID NO:3942

LENGTH:273

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04667

SEQUENCE DESCRIPTION:

GATCAACTGG CTTTCTCTA TTATGACTTT AGATGAATCG TTTAATAGA TTTGCTAATG 60  
 TTAAGACATC TCTGCATTTC TACAAGAACATC TGATGTAGTC ATAGTATACT ATTCTTTAA 120  
 TATACATCTC CTTTCAATGT TAACAGTGGT TATTTATGAT TGGTTGGTCC ATAGTAGATT 180  
 TTTATTTGT GTTTCTTATC TGNACTTTCT GATTTCTTA CAAAGATNNG NGNNNTACTT 240  
 GTATAATAAA AATAAGAGCT TTAAATNGTG AAA 273

SEQ ID NO:3943

LENGTH:268

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04668

SEQUENCE DESCRIPTION:

GATCGCGTCC AGATGGAAAA CGGAAGCAGA GGCTTCTAAT CGTCGCATTT ACTGGCTCCA 60  
 GTGCAACACA TCCATCTGAA AACACTCGGA AGTCTGGTGC TTGGAGAGGG TGCCATTGTC 120  
 TCTTGTACAT AAGGTCTATGA CGTGTCTATG TCAAAAGTTC TTATATATT CTTTTATAAG 180  
 CTGAAAGAAG GTCTATTTT ATGTTTTAG GTCTATGAAT GGAACGTTGT AAATGCTTGT 240  
 CAAACAATAA AAATAACGAA AAGTGAAA 268

SEQ ID NO:3944

LENGTH:268

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04669

SEQUENCE DESCRIPTION:

GATCTNGTGC CTGGAAATAG CCTGAGGTGG CTCAGGAAGC GGAGAAAGGG TGCCAGACCA 60  
 TTCTCTGGCG GGGACCAGGG CCCAAGGCC CAGGGCTGGA AGNAGACCAA GGGGCAGCCG 120  
 CCCTGGAGGG ACATCAGTGC TTCCCTTTCC ACCCAATTCC CCCACGCGGT TCCATGTTT 180  
 CCCACCAGCC TGTTGGCGAA GTTGCTGCTC CGGCATTCAAG TACCTNNNTNN NNCCAGAGAA 240  
 ATANNNGAG TTTCTATTTT ATGTTAAA 268

2153480

SEQ ID NO:3945

LENGTH:267

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04670

SEQUENCE DESCRIPTION:

GATCAGATGG TTTAAGGCTA CAACACGAGG CCAATATCTG TATGTNAAGG AGACAGAAC 60  
ATCAATGTTT GGAGTATATA TTGACCTTCA TTCTTACTTT CTCCCTTATTC TCTTATGTAA 120  
CTGTTAATTT TTCCCTTCCT TGGCTCTATG TATTTAATTA TAATAAGCTT TACCTACAAG 180  
CAAAACAAAC CAAACATGAA CAATGAAAAC TACTTTGGT CATGTAGCAG AAACAGCAGT 240  
CAATAAAGGA GAGAATGAAA CTAGAAA 267

SEQ ID NO:3946

LENGTH:266

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04671

SEQUENCE DESCRIPTION:

GATCCTGTGA AAGCTGATGC CCATGTGCC TGAGAGCTGC CTCTCAATCC CTGTCCAAG 60  
CCACAGCTAT GGCGTTAATG TCACCACTGT TCTCACCCCTC TAGGCCCTGT GCCTGGAGGT 120  
GCCTCCACAG CCGACCAGCA GCCACCCCCGC CTGCTTCATC CACATCAGGA GGGTCCGGTG 180  
AGGCTGCAGC AGTGGTAAAG GAGTAACACC TTCTTGATT AAGGAATTAA 240  
AAATGTATGT TGGAGATACT GTTAAA 266

SEQ ID NO:3947

LENGTH:265

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04672

SEQUENCE DESCRIPTION:

GATCCCTAGG TCTTGGGAGC TCTTGGAGGT GTCTGTATCA GTGGATTTC CATCCCTGT 60  
GGGAAATTAG TAGGCTCATT TACTGTTTA GGTCTAGCCT ATGTGGATTN TNNCTAAC 120  
TACCTAACAGCA AACCCAGTGT CAGGATGGTA ATTCTNATT CTTCGTNAG TTAAGTTTT 180  
CCCTTCANCT GGGCACTGAA GGGNTATGTG AAACAATGTT NAACATTTC GGTAGTCTTC 240  
AACCAAGGGT TTTTCGGTT TAACN 265

SEQ ID NO:3948

LENGTH:265

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04673

SEQUENCE DESCRIPTION:

GATCTAGNAA ATGCATATAT TTAGCGGGTA TTTGAAAGAT AGAAGCATT A TTATAACTG 60  
AAGAGTATAA CACTTATCTN CTTAAGTAAA TGCTCTCAT A CTTGTATAC ATTTTNCAG 120

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GTACAAATTC AAAAGTATGT AAGCATTGTA TAATGTGACA ATTGTATAAT TTATGTAATC 180  
 TGATGCATGA NTCAGAATT TTATATAATA TATGATTATN GACTTATAGT TGATTAANGT 240  
 GTTTAANCTT AAAANANAAN ANNNN 265

SEQ ID NO:3949

LENGTH:263

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04674

SEQUENCE DESCRIPTION:

GATCTCTAAA CTAGCTCTTT TGTAGTATC GTCTCACAAA CTGATTATTT TCCTCTTCT 60  
 TTGGTAAGGT CAATAACTGG GAGATGGACA AACTAGAGAT GGAAGATGCA GTCACATTT 120  
 TGAAGACTAA AATCTATTCA GTAGAAGCTC TTCTGTTGC TGCTGTAAAT GTGCAAAGCA 180  
 CACAATAAAG TGAAAATCAA CCTTTCATA TTAGGAGACA TGCATTTGTA AAAATTAATA 240  
 AAGATGACAA GTCAGTTNTC AAA 263

SEQ ID NO:3950

LENGTH:261

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04675

SEQUENCE DESCRIPTION:

GATCCACACA CTACAGGAAA CAGTTGGCTT TGGAAATCCA TCTTCTGAT ACCCCCTCCAG 60  
 CTGAACAAATT TTCTGCATGG GACTCTGAGT TCCTTCCTT CCCAGAGAGT TTTACCGTAT 120  
 GAAGCCTGGA GCTGGAGAAC GAAAGAAATCT TCACTATAAA CAGAGACCCA TTCATTATT 180  
 TCCATTGGCT GTGTTACTGG ATGTTTACT GGTTGACGAG AAACCTGGTC ACAATAAAAA 240  
 AATGGAGATA TGAAACTCAA A 261

SEQ ID NO:3951

LENGTH:315

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04676

SEQUENCE DESCRIPTION:

GATCTGTTG TAATACAAGG TATTTGGNCT TGTCTTTAAC TGTATAGTGA TTTGTGGGCA 60  
 GGCTGCAGGA GCCAGGATAA AGAATGCATG TTGAAATCT NCTCTATACA AATGCATCCA 120  
 CACTCTCCNG CAAAGGGATG AGTTCTTAG CGTTTTCAC TTGATACAAA TGCTATTGTT 180  
 TCCTTGCGAN GGNGTGAAAA ANTGNANGCT CCACCTGCTC CGTGAGTAGC ATTGCTCTCA 240  
 ACTGGTGTTC CCAGCCGTT ACATGTCTAC CCATTCTCTC CCTTANGTT TTCTTAGGGN 300  
 GCNGGNGGNT GNNTN 315

SEQ ID NO:3952

LENGTH:258

TYPE:nucleic acid

TOPOLOGY:linear

2153480

CLONE:HUMGS04677

SEQUENCE DESCRIPTION:

GATCTAAACT TGATATGTTA AATTAAATT TAATTCccc AAGTGTGAGT ACTATATGTN 60  
ATTGTAGATA ATTGCAAAC TACAAAAAAAT AAAAATAATT GGCTGGCGT GGTGGCTCAT 120  
GCCGTAAATC CCGGCCTT GGGAGGCCGA GGTNGGTGGA CCACCTGGGG TCAGGAGTTC 180  
AGGACCCGGC TGGCAACAT GGTGAAACCC GTCTCTGCTA AAGGTATAGA AGCTNGCCGG 240  
GTGTGGTGGT GGGCACCN 258

SEQ ID NO:3953

LENGTH:258

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04678

SEQUENCE DESCRIPTION:

GATCCTCACT CAACGAAAAC TCGNTGGAA ACTGTTCCGN CTGGCAGTCC TTTTTGTTG 60  
TTTCCATCT CATTCCCTT CCATCTGAAA GTGGCATTCA GCTGACTNGC TCATTTAGAC 120  
NGTTCACGGA GTCTGAATCT GCCAACGTGG TGTTGGAGGC TCCACCTGA AAAGGGCCAC 180  
AGTCAGGGCA ACTTTCCCCA TACAGGAAAA CTTGAAAATT ACATCAACAG TCTACGTCAC 240  
AGCCAAATTA TATTCCN 258

SEQ ID NO:3954

LENGTH:257

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04679

SEQUENCE DESCRIPTION:

GATCCAGTGG CTGCAGCTTC AATCCCAGTG CTGNANTCAC ACATCCATTG TGCCCTGGGG 60  
GACCCTGGAG CCTACTTGTG CGCTTGCAT TTCATTGATT GACGNCTCCC TTCAACAAGC 120  
ATTTACTGNG CGCCTACTAT GTACTAATGC TAGANGTTAG ATGTACAAAG AAGACAGTTT 180  
TCATCCTCTA GGNACTCATA GGCTAATGGT GAGACACACA GACANACATC ATTATATTAN 240  
AATANGCTAA GNGAAA 257

SEQ ID NO:3955

LENGTH:257

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04680

SEQUENCE DESCRIPTION:

GATCTACAAG GCCACACAGA TAATTNCAAA TACATCTCAT TTCCCTCTGA TTCAGGCCTC 60  
GGNAGACCCC AAGGGGAAGG AGTTCTCATG GGNCACTATA ATCNATGAAG CTGAAGTTGN 120  
AATATAGANG GCAGATTAA AGTATTACATT TTTTTTAAA CACCAAGCTAT GGTCCCTTCA 180  
AAATTGTACA AGCTGTCACT ATCACCTGCA CATGAGCAAT TTAGTCTNNN GGNGGNGTGA 240  
GAAGTTTAGG TCTTTNN 257

SEQ ID NO:3956

01274

LENGTH:256

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04681

## SEQUENCE DESCRIPTION:

GATCTGCCCA CCTCGGCCTC CCAAAGTGCT GGGATTACAG GCGTGAGCAT GAGTGCCCAG 60  
 GCAGAGAAAGT CCTACACCAC GTGTCAAACG CGGAACACAA AGGGNCACTG TCTTATTGCT 120  
 TGGTACAGTA CTCCCTGTTG TTGAGAGCCC ATTTACTAGA GCAGCTCTGT TTGTGCTTAA 180  
 TGAAAGCTCT TTTCTGAGAG GCAACAGAGT GTGTTCTATC ATAAATGAAG CGCTCTTCAA 240  
 GAACTTCCTG AGCAAA 256

SEQ ID NO:3957

LENGTH:254

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04682

## SEQUENCE DESCRIPTION:

GATCCACCGT CGGATCCGT CTGCAGAGGA GGACGTAGGG GGCGTCACA CCCACCAGGC 60  
 CTCCCTGCTG TGCTTTAAC AAGGCAGAAAG AGGTTCATGG CAATATAATA GTCAATGAAC 120  
 TTTCAGTTA AATTGTGTAC ATTTTTAAAT TGTAAGATT TTACTGTATA TTGATGCATA 180  
 GTGTGATTC AAAAAATTGCT TGTAATTAA AAACATTAA ATATTCAAAA TAAATATAGT 240  
 TATATATTAA TAAA 254

SEQ ID NO:3958

LENGTH:252

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04683

## SEQUENCE DESCRIPTION:

GATCTGTTT AAAGTTGGGG GGTGGGAAAT TTAGCTGACT AGGGACAAAC ATGTAACCT 60  
 ATTTCTAT GAAAAAAATT TAAATGTCC CACTGAATA ACGTAATTCT TCATAGTTT 120  
 TTTAATCTAT GGATAAAATGG AAACCTAATT ATTTGTAATG AATTATTAG ACAGTTCTAA 180  
 GCCCTGTCTT CTGGGAGTTA TCANTNTAA AGAGANCTTT TGTGCAATT CAAATGAAGT 240  
 TTTTATAAGT AN 252

SEQ ID NO:3959

LENGTH:251

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04684

## SEQUENCE DESCRIPTION:

GATCCGGAGT CTTTGAGGCC ATTNTTGAAAC TACTAATTCA ACTAATCCTG AACCAACATA 60  
 TTTTCATATT CATCCATGAA GTGTTAAGTG TTCTTATGAT TTAAACCACT TAGCATTGGT 120  
 TTTTATATT CTTGCAGCCA AAATCTCCT AACAGTAAAAA TAAAGTTCA AGTTTCATAA 180  
 GTGCCAATGA TTTTAAATG TTAATAAATT TGTACTAAAT AAAAATGGCA ACAGGAGCAG 240

GTAAACCTAA A

251

SEQ ID NO:3960

LENGTH:251

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04685

## SEQUENCE DESCRIPTION:

GATCTTCTAA CTTATAAATG TCAAATATAT TTTGTATTA GATTGTGCCT ATNATGAGAG 60  
 AAATCTTAA TGATATTTN ATGTATGCTG AACACATTT TATAATTGN CACACTGGGA 120  
 GGCACTGGTCT AGTAATAATA ATGTAATATG TACCTTGCTG GTTANTATAA CTAAGATTT 180  
 GCCTTTATTG GGTTAGGTAT CTNTNTTTA TTNTNGCACC NGNTAGCTGN CTTCTACTGA 240  
 GTAAAGANTT N

251

SEQ ID NO:3961

LENGTH:251

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04686

## SEQUENCE DESCRIPTION:

GATCCAACCT CAAAGAAAAA GTTGGAAAGG GCAAGAGTCT TTTAAGCGGA ACTTCATTC 60  
 TNNTNNCATG GTTACTTATA TATAATGAAT ATAATAGAC AAATAGGACT TGGAAAATGT 120  
 GGTATATTCT AAGTCAAGAT GCTATGAAGT TGTTATAGTT TAAGGGNCAT TCTTAAGAAG 180  
 GAATTACTTA AGTNCAATTAC TCTNCTCATT TCAAGGACAT GAAAAAGTAA AGGATGGTCT 240  
 GGCACATT N

251

SEQ ID NO:3962

LENGTH:250

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04687

## SEQUENCE DESCRIPTION:

GATCCTGGAG ACGCCATTTC CGAGATTGTT CTGCATATTC ATTTGCACAT TGTTGTCTGG 60  
 GTTGGACATG CGTGTGGCT TCAGTGTGAG GCTTTAATA TGTATATCCT GTTATCAATA 120  
 AAACAATTAT CCAAGTGGTT GAATCCTGTG AGACTTGGCA AGTGTGTGCA AATNAAGTAT 180  
 ACTTGACTTT TCAACCTCTT CTTCAATGT NGCNNTTATA TGANATAAAG TAATCCATT 240  
 ANCAGTTAA

250

SEQ ID NO:3963

LENGTH:245

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04688

## SEQUENCE DESCRIPTION:

GATCGACATG AGATACAGAC GAGAGATTAT GTCTCTTATG GCTTTATCAT CAATTAAC 60

TAGCAAAGTC TGTTAAATTT ATTCAGAGT CTCCCAGCTG TGAAAAGTAG AGTTCCACTT 120  
 ATGTATCCA TATCTGCACA GTAATCTTT TTTAATCCT AAACTTCTT AACAGGTTTC 180  
 TNCTCCTNAT TCTAGACAAT AATGCTATGT GTTTCCCTTG AATACCATGA TTTTAAACTN 240  
 TTAAA 245

SEQ ID NO:3964

LENGTH:245

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04689

SEQUENCE DESCRIPTION:

GATCGGTCA GCTGGGCCA AAAACATGGC AAGAACGTC CCACTGTCAA CCTCCGGGC 60  
 AAGCGTGTGC ACCTGCAGCT CAGGGCCAGC CCACCACACT GCCTTAGTGA CACTGCAGCC 120  
 GGGGGAGCCA CAGGCCGCCA GCAGGCTGAG GAACAATGCC GTGTGACCTT TCCNNNNNNN 180  
 AAAAAACAAA AACTGCAATT TTTATTCAAA TAAAAAAAGG GTAAAAATAA AAGTTAATAA 240  
 GGAAA 245

SEQ ID NO:3965

LENGTH:244

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04690

SEQUENCE DESCRIPTION:

GATCATGGAA AGTTCAAGTG AAAACCATCA TGCTGTCTTC CAGAACCAAG TTCTCCTCTG 60  
 AGGAGGATGA ATGAAGGTTG GGTTTCAGTC ATCATGCCTG CCCTTTTTT CTTTGTATTG 120  
 TTTCTTAAGC ATCTCAGAGT CCTCTCATGG AATTGGTTT CTATTTCCCC TCCCAATCTC 180  
 CACCTCACTC CATATCATAA GACATGTCTG CATTCTGGAA TATTAAACGT GGACATGGCT 240  
 CAAA 244

SEQ ID NO:3966

LENGTH:244

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04691

SEQUENCE DESCRIPTION:

GATCATGCTT TTCCCTACTA AACTTCTGTA ACTGCATGTA TGATACATTA TTGCAGAGGT 60  
 AAGAGATAGT TTAATGGATT TTTAAAAACA ATTACTATA ATTNAATCTGA TGTTCTCTAG 120  
 TTGCATTTG CTGAAATGTA GTGCTGTTCT AAATTCTGTA AATTGATTGC TGTTGAATTA 180  
 TCTTCTGTT GAGAAGAGTC TATTGATGCA TCCTGACCTT AATAAAACT ATGTTCAAGTT 240  
 TAAA 244

SEQ ID NO:3967

LENGTH:242

TYPE:nucleic acid

TOPOLOGY:linear

2153480

CLONE:HUMGS04692

SEQUENCE DESCRIPTION:

GATCCAAGCC CTTGTTCAAGA TTTGGTGCCT GATAAGACAG GGGTTTCCT TTTGTGACC 60  
TTTATTATTA TTATTTGTT AACTGTTGTA ACCAGTTAGC TGTTGTGTT TAAGATAGAA 120  
AGGAACAAGA CTAAAATTGT AAATACCTTG TAAACATCG CATTGTACT TGAATAGTAG 180  
GATTTAAAG GGCATTGATA GCATACCAAA CAAAAGGCAA AATAAAGTGA CCTTTTATA 240  
AA 242

SEQ ID NO:3968

LENGTH:241

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04693

SEQUENCE DESCRIPTION:

GATCTTCCTC CCATGAAAGA AAAANCAAGA ACCAGAGGCC TAGACTNACT NAAGACACAA 60  
CTCCTGGCTT TCTNAAGCTA TGGACTTGGA TTGGATTGCT GGGGGTTTT AGAGAAAGGT 120  
GACAAATTTC AGTACCTCTG GCATGCTGTC CCAGGAAACT AGGGCTCCCA CTAACCTATG 180  
AGGTTTTAA ACACATTGAA AATGACATGA CACCTAAAAT AAATTGGAT TTGCTCATAA 240  
A 241

SEQ ID NO:3969

LENGTH:240

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04694

SEQUENCE DESCRIPTION:

GATCAAGGGT AAGAATAAGT ATCCACCTCT TTCCCTTTAA AAATTTCCC TCAGAGTCCC 60  
TATGTTGCAT ATTNATTCT GTTCAGAATC TAACCTTCCTA CTAAGGCTTA TCTTCTAAC 120  
AGATACTAAT TATGAATGGG CATCAACAAC TCTAATTAAA CCATTCTTA AAACCTCTCT 180  
GGGTGTTTC ACAAAAGAAA TTCTCCATG TTATGATGTG TGTGGTTGCT AAAAAGTAAA 240

SEQ ID NO:3970

LENGTH:238

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04695

SEQUENCE DESCRIPTION:

GATCCAGACT GGCCAGATT GAACCTCCAGC ACTATTCTT GATACCTCTG AAACCTGGGA 60  
CAAGTAACCT AGTCACATG TATGAAAAGA GATAATAATA CTAGTACCTT CCTCATACTA 120  
CAAGACTACA AGATGTGGTC AAGACCAGAA ATATATAAGC ACTGTAAAAA CAATGTAAAA 180  
CCAAATGNAA ATTCTTCATT TGTATCTNCC AAAAATAAAA AAATAGCTAT TTGGGAAA 238

SEQ ID NO:3971

LENGTH:238

TYPE:nucleic acid

01278

2153480

TOPOLOGY:linear

CLONE:HUMGS04696

SEQUENCE DESCRIPTION:

GATCAACCAG AAAAAAAA TATNATGAAA TGGATACACA CAGTGGACAC CTGTGAAGTT 60  
ATCTTAGTC CCCCCAAACT GAGANGTACA AATTAGTCTC CAAACCTAAT TACCAAGTTA 120  
CAGGAAACAT NGGGAAATAAA AGANCAANTT AACAAACACAA AGAAGCAAAC ANCCAANTGC 180  
ACAGTTGGG AAATTCTGCA GAGGTAATGG CCTAGTTTT TANCCAGTAC ATGTCAAA 238

SEQ ID NO:3972

LENGTH:237

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04697

SEQUENCE DESCRIPTION:

GATCATAAAT GACAGGTGTG TGGAGGTCAT TGCAAAGGAA GGACAAAACC TGAAAGAGCT 60  
ATATTNGGTG TCCTGTAAA TCACAGATTA TGGTAGGTAA TGANCCATT NCCTAATCCT 120  
TTCTAAGANT AAAANGTTAC AAAATCATTG AAAGTNCTTA AAAGGAAATC AAGANCTATA 180  
TCATAGAGAC TGTCTATCGT CACTTATGCT CATNGTGACC NTACCAAANA NTAAAAN 237

SEQ ID NO:3973

LENGTH:236

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04698

SEQUENCE DESCRIPTION:

GATCGTAGAA GCCAAATGAA ATGTGACATA TCTACTGACT GATGACAAGG GAATTTCATT 60  
AGGAAGAAGG TAAAGAAACA TCGTTGAGTA GCCTACCTTG ATTTCTGTCA AGTTCTAAC 120  
CAGCTTCATN CTTTAAAGG CTTCAGGTTT GAAATTAAGT CAACTGCATG CAGCTTGCT 180  
GATAAAATGAA TAATTCTCTT TGATGCCATT TATGAGAAAA GACTTCAATA TCTGTN 236

01279

2153480

SEQ ID NO:3974

LENGTH:173

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04699

SEQUENCE DESCRIPTION:

GATCTTCAG TTTAGGAGCA ATTGGTGAA AGGAGTCGGG TGACCAGAGC TGGATAACC 60  
GTCTGCATGG CTGCACTCTG GTANCAGAGT GGNACAGAN GTAAGGATAG TGTGGAGGGC 120  
ACAGTTGCAA GTTGAGTCTT TCCATGAGAC AATGTGCCAA AGTTAAAAAA AAN 173

SEQ ID NO:3975

LENGTH:234

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04700

SEQUENCE DESCRIPTION:

GATCCCTAAA TAAGTAGTTA TTCTGTTTC CCTGATTTN AACTTTACT AATAGAATGA 60  
GAGTAAATAT TTTGGGTAT GTGGCTTCTT TTGTTCAACA TTGTTTAAG ATTCATCCGT 120  
GTTGCTTG TGAGCTGTAAT TTGTTTAAT CTTTATAGTA CATTCAAGTT TGTNAATGCT 180  
TATTGTAGGA CTGTACCATATA ATACAGGCAG CATGCTGCTG ATAAACACTG GAAA 234

SEQ ID NO:3976

LENGTH:234

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04701

SEQUENCE DESCRIPTION:

GATCCTCCTG CCTCGGTCTC CCAAAGTNCT GGGATTGCAG GTCTGGTCT TGATNCCAAG 60  
TTTGGGAAAG NAGCTAAGAA GACATCCCAC TAGGAAGAGA GAGACTACCT CCACATCAAA 120  
AATATTTAAG TNATTATCTC AAACAGTGAC ATCTCTGGG AAAATGGACT TAATAGGAAT 180  
ATGGGACTGA GTTCCAGTCT TTTNAATAA AATAAAATCA AGCAANATCA TAAA 234

SEQ ID NO:3977

LENGTH:234

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04702

SEQUENCE DESCRIPTION:

GATCAACCCC GTGAAGGTGG CCAACCTGGT GAAGGCCTAC GTGGACAAGT ACAGGCACAT 60  
ANCNAGGCA CANGAACCA GAGGCCGGGG AGGAGCCGCC CACGCAGGGG GCCGAGGGCT 120  
GAGGCCAGGC AATCACGGGC TATGCCNGGG AGCTGTGGG AGTGGCGGGA ATCGGGGCCA 180  
TGCCCCGGGA GCTGTGGGA GTNGCGGGAA TNGGGGCCAT GCCCGGNGGA GCTN 234

SEQ ID NO:3978

01280

2153480

LENGTH:231

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04703

SEQUENCE DESCRIPTION:

GATCATCGCA TTGAAATGGT TTTGGGAAGT ATGGAAAATT AAATGGATTT TTGAGACACT 60  
AGTTTATTGG CTATGCAAGT GACAGTTTG AAAAAGGCTG AATCTTATTG TTGGAGCCTA 120  
ATGTAAATGC ATATATAAT TCTGACTGTA TTTCAGTCAG TGTTTCTG GAAAATTCC 180  
CAGATTGGAA GCAGAAAGTA CAGACCAAAT AAAGATTATT CACCCACCAA A 231

SEQ ID NO:3979

LENGTH:231

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04704

SEQUENCE DESCRIPTION:

GATCGCTCTC ACTGGCCTGC TGCAGATNAG CCAGGGGGAG CCTAGGCCA GCTCCTCCGC 60  
GGTTGGCCCC CCAGACCATA CCTCTGACCC ACCCAGCCCC CNNTGGTAGC CCCAGCAGTT 120  
CTCAGGGTGC TGACCTCTCT CTCCCACAGA CCCCCAGACAC CCATTGTCCA TAGCCTTCTN 180  
AGGGCAGAGT GGGCTGGTTG TGTGACAAT AAAACAGTGT TGGTTGCAA A 231

SEQ ID NO:3980

LENGTH:242

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04705

SEQUENCE DESCRIPTION:

GATCAAGTCT TGTCAGTTCG TGCCCTCTT CCCCATGTT CCGGGGAAGA CGGGTGGTGG 60  
CAGAGTGAGA AGGCCACTGG TTCTGTGCCG CAGCACGCAA AATTTAGAAT TCTACAGACT 120  
AGCTCTATAC GTAGTGAGGA CCCAGATTAA GAGAAACTGA CCAATATTAA TCTCCGCATT 180  
TGTGTGTGTG TCCAECTCTG TAGGNCAATA AACCANCAAG ACAAAATGAAC TGTGCTTCCA 240  
AA 242

SEQ ID NO:3981

LENGTH:230

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04706

SEQUENCE DESCRIPTION:

GATCCACCTC TACACCAGCC CAGGAAGCCC CATCTGTGCC TGCCCTCAGG TGGTCCACCA 60  
GTCTCCCCCT TTGGTCCCT TCCAGTCTNT TCCCCCTTTC TATCCCAATN ACCAATAGAA 120  
ATGCTAACAT CCCTGCCCTGG TAGCCAGACT AGCCCACCAA AGCTCCCCCTG TAAATGGGGG 180  
CTCCATTAGT TCTGCTGCCG AGACTAATAA ACGATTTGGT TGGCTCTAAA 230

SEQ ID NO:3982

01281

2153480

LENGTH:229

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04707

SEQUENCE DESCRIPTION:

GATCTATTCC CACATGANGT GCGCCACCGA CACGNAGAAC GTCAAATTT TTTCGACGC 60  
TGTCAACCGAC ATCATCATCA AGGAGAACCT CAAAGACTGT GGCCTCTNT NAGGCAGGGC 120  
CTGTNCTGCA GTCGGGGACA AGGAGCTTCC NTTGGCAAG GCCGGGGCAC AATTGCAC 180  
CCCCCTCAGCT AGACGCACAG ACTCAGCAAT AAACCTTTGC ATCAGGAAA 229

SEQ ID NO:3983

LENGTH:226

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04708

SEQUENCE DESCRIPTION:

GATCCTCCCT GCCCAAGTCT TACTTCGTGA GCTGGCCTTG CTCCCCATCC CCCAAGTGCC 60  
TCACCAGTCC CCCAGACTGG GTGAAGGTAC AGCTGGCTCC TTTCGGGGGT GCAGCTTCAA 120  
CTCTCTCGGC GGTAGGGCGG TGCCATCCCC ACCCATAGGG CTGGCTACA TCCAGTCACT 180  
CCCAACAGCG TCCANCACAC AAATAAAAGA CCCTTTGGCC CTGAAA 226

SEQ ID NO:3984

LENGTH:226

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04709

SEQUENCE DESCRIPTION:

GATCACTTGN GGTCAGNCGT NCGAGACCAN TCTGGTCAAC ATGGCAAAAC CCCGCTCTG 60  
CTAAAAATGC AAAAATCAGC TGGGTGAGT GGTGCGTNCC TGTAATCCCA GCTACTGGGA 120  
GCTGAGGCAGA AAGAATTGCT TGAACCTGGA AGGTGGTAGG CTGCAGTNAG CCAGGATTGT 180  
GCCACTTCAC TCCAGCCCCG GCAACAGNGC AAGACTCTGT GTCAAA 226

SEQ ID NO:3985

LENGTH:225

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04710

SEQUENCE DESCRIPTION:

GATCCTGGGC CAAACTGATT TACTATTTA ATTNNAGTT TTAATGNAC AGGGCCTTGC 60  
TATGTTGCAG GGTGGTGTG AACTCCTGGC CTCAAGCAAT CCTCTTGCT CAGCTGCCA 120  
AAATGCTGGC ATTACAGGCC TGAGCCACTG CCCCTGGTCT GATTTACAAT TTTNAATTGA 180  
GGGTTAGGGA GTCATAATAAC CANCAAAGAT GGTAAAAGGA ATTIN 225

SEQ ID NO:3986

LENGTH:221

01282

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04711

SEQUENCE DESCRIPTION:

GATCATCCTC TAAACATTTC ATCATTATT AATCCTCCCT GCCTGTGTCT ATTATTATAT 60  
TCATATCTCT ACGCTGCAAA ATTGGGTCT CAATTTTAC TGTGCCTTG TTTTACTAG 120  
TGTCTGCTGT TGCAAAAAGA AGAAAACATT CTCTGCCTGA GTTTAATT TTGTCCAAG 180  
TTAATTAA TCTATACAAT TAAAACCTT TGCTATCAA A 221

SEQ ID NO:3987

LENGTH:221

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04712

SEQUENCE DESCRIPTION:

GATCATCATC TGTGAAGCAT CATGGTAGCT TCCAAGCATT TGCAGGCCAC TGGCCAGNTG 60  
CATCCAAAAC ACATTCAAGGA AACCCGAGAG TTGTAAGTTG CACATGTGTG GCCTACAGTG 120  
ACTTCCATGT AGTAACAGGG NTNGNGCAAGG CANGNTCTCC ACCAGACTTA AAGCATTCAA 180  
CCACTCTGCC CCCAGGGCGA CACTGGNCAT GTGGTTCAAT N 221

SEQ ID NO:3988

LENGTH:220

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04713

SEQUENCE DESCRIPTION:

GATCTTTTA AGATNNNAAT AAAGAGCTTT CCTAAATAAA ATAAGCAATA TTTAACTTA 60  
GAAACTGTAC TCTATGAAAC GTGTTTATG AAANCATCTN TTACAAAAAG TGCTTACTTA 120  
ACTCAGCAAG AAAGGTTAA TGTACACATT TNACANCTAA ANTCAAAACC TACAAGAAC 180  
TGCAC TGCT TCACTATTAA CAAATCGGCC TACAAGGAAA 220

SEQ ID NO:3989

LENGTH:218

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04714

SEQUENCE DESCRIPTION:

GATCTGGCTA TCTCATGAT TATATTTTC TTCCCTTATA CTGCAAAGTA CATCATAGGT 60  
ATAATTTAT TTTGAGAAAG AACTATATTC CAATTTTACCA TATATATTCC TACTGTAATA 120  
ACCAAGAGGA CATTCAAAA ATGTATATGC TACTATTTTC AGAAGGNATAGATACTAAA 180  
TCTTTTAAG CCTTATTAAA CTATGTTTA TATTGAAA 218

SEQ ID NO:3990

LENGTH:217

TYPE:nucleic acid

01283

TOPOLOGY:linear

CLONE:HUMGS04715

SEQUENCE DESCRIPTION:

GATCTGTAA ATTGGATTTC ACATGTACAT TTGAATGCCA GAATTTCTAA ATAAATCCCC 60  
 TGTTAGGAA ATTTAAAAG TCAAAGCTTG TTTCTTCAA CCACTACCTT CTACATTGGT 120  
 TGACTTAGAC CGTAAGCTTT TTAAGTTCT CATTGTAATT TACCTTCTCA TGCGAGATTGC 180  
 TGATGTTTA TTAAACCTTA TTTTACAAA AATGAAA 217

SEQ ID NO:3991

LENGTH:281

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04716

SEQUENCE DESCRIPTION:

GATCTTATTA GACTCATACA TCTAATTATA GAAATACATA GACTTGATAG AATTTNATT 60  
 TCAGGCNTGA AGAAATATTC TTTGGAAAAG CTAATTTTT GGTGATTGAC ATAAAGATT 120  
 ACTNGCTCAT ATTANCTNGG GGGGNTAGTA CTCTCCAAGA ATTAATGTGC CCTAAAAATT 180  
 TTCCTCCAAA ANCTTATCCT TATCATGTGA TAATGANGAN CATTGATT CTTGAAAGGA 240  
 GACTGCTGTA GGCAGCATCT GGGAAATGCAA NTNNNGGGNN N 281

SEQ ID NO:3992

LENGTH:217

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04717

SEQUENCE DESCRIPTION:

GATCAGCCTG GGCAACATAG CCATAGTGAG ACACCAACTC TCTACAACAG CAAAACAAAA 60  
 CAAAACAAAA AAACATGCAG CTGGGCATGG TGGTNACACC TGTGGTCCTA GCTACTCAGG 120  
 AGGCTGAGGT GGGAGGATTG CTGGAGCTAG GATGTCAAGN TTAGTGANG TATTGACCA 180  
 CTNACTCAGC TGGNAACAGA NGAGACCTGT CTAGAAA 217

SEQ ID NO:3993

LENGTH:216

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04718

SEQUENCE DESCRIPTION:

GATCATTTC TGAGGCAGGA GCATAAACACC TTCTCTAGGA TTTGTCAGCT TCTAAAAAGA 60  
 GCCTTTGTA AGGACTTGTA TGAGCTGGG TTTCACCATC ATTACTGGGG AGGCACATAAG 120  
 ACTGCACATA TCTCTGGGTG AAGTAATGTC TACACANCAC CTTTCATAGC AATAGTTCCC 180  
 AGCTAGCATA CCTGCTTCTG CCAGTCCAGG GCCAAA 216

SEQ ID NO:3994

LENGTH:220

TYPE:nucleic acid

2153480

TOPOLOGY:linear

CLONE:HUMGS04719

SEQUENCE DESCRIPTION:

GATCCAGACT ATAATCCTGC TGACCCAGAG AGTGAETCAAG CTGACTAATG GACTGTCCCC 60  
ATCTGCAGAG AGGCTTGACT GCCACAGCAT CTGTGGCTAT GCTCAGAGGG TTATGATTT 120  
CCTTTCTTT NNNTAAGAAA AAATTATTT CAGGAGAATA TTCTTCTGAT AGCTTCATC 180  
ATTGAACCTTA ATAAACTGAC CTTAAAATTT CAAATATAAA 220

SEQ ID NO:3995

LENGTH:215

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04720

SEQUENCE DESCRIPTION:

GATCTAAGGA AGAACTTGCT GCTGCAGTAT TGAAACTGTG AAGAACTGAC ATTTGAAGAA 60  
AAATAGATTA CCGTTGCGGG ACTAGAAATGG GCGACTGCTT GGAGCCAGTG CTTGTTTTA 120  
TCTAGGACAC TTACTGTCT GTGAAGTAGA ATACATTTAT CTGCATTAG TTTGTTAATG 180  
TCTGAAATGA ATAAAAAGAG GAAATTGCGA TTAAA 215

SEQ ID NO:3996

LENGTH:214

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04721

SEQUENCE DESCRIPTION:

GATCCAGAGA CAGAGGCAGC CTGTCTTTTC AGTTGGTTTC TGCTTTAAT TTACTTGTAC 60  
AATTCAATTGT TACTGTTCTG TTTTCCTAT TAATCTTTG TCAACTTCCT GATTATGTAA 120  
CAAAGTATGT ACAGTCTACT TTTGACCTAT TTTTATCACA GTATNATTNA TTNCTCTTT 180  
CAATAAAGTA CTNGNGCATA TTCCACTGC CAAA 214

SEQ ID NO:3997

LENGTH:214

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04722

SEQUENCE DESCRIPTION:

GATCCGNAGT TCAAGGGAAG AGGAAGTTGC CTCTNAGCTC CATCTCTCTG CGCTGCTAGA 60  
CATGGTGGAC ATTTGAGCAG CCTGACCTGT GGGGAGGGGG TCTCTCCGA AGAGTTCTG 120  
TTTTTACTCA AAATAATGTT ATTCTCAGAT GCTTGATGCA CTGTTGGAAA NGGGGATTAA 180  
TTTAATCATG CAGATAAACC ATTTAAATGT CAAA 214

SEQ ID NO:3998

LENGTH:212

TYPE:nucleic acid

TOPOLOGY:linear

01285

2153480

CLONE:HUMGS04723

SEQUENCE DESCRIPTION:

GATCGAAACC AGCCTGGTCA ACATGGTAAA AACTGTCCC TACTAAAAAT ACAGAAATNA 60  
GCCAGCAATA CAAAAATTGG CAGCTGTAGT CCCAACTACT TGGNAGGCTG AAGCACAGA 120  
ATCGCTTGAN CCCAGGAGGT GGGAGGTTGC AGTGAGCTGA GATTGCGCCA CTGCACTCCA 180  
GCCTGGGCGA CAAAGCGAGA CTCTGTCTCA AA 212

SEQ ID NO:3999

LENGTH:211

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04724

SEQUENCE DESCRIPTION:

GATCTCAGNA ATTGGAAAAA TTGTCCGTGTC TGTCACTTGT TTTGTTGCCT TAATAAGCAT 60  
CTGAATGTTT GGTTGTGGGG CGGGTTCTGA AGCGATGAGA GAAATGCCG TATTAGGAGG 120  
ATTACTTGAG CCCTGGAGGT CAAAGCTGAG GTGAGCCATG ATTACTCCAC TGCACTCCAG 180  
CCTGGGCAAC AGAGCCAGGC CCTGTATCAA A 211

SEQ ID NO:4000

LENGTH:210

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04725

SEQUENCE DESCRIPTION:

GATCAAGGCT ATGAACATCT TGTGAAGTAG GATGTTAAGT CTGCAAATAT CAGAGTGAAT 60  
CCAAACTTAT CAATTCAACA CTGGATTGTA AAACAGCTCA AAAAAAGACT AAAAACACAG 120  
CTCTACACTT TAGGAGGTTG GGGCAGGCAG ATTGCTCGAG CTCAGGAGTG GGAGACAACT 180  
TTAGGAAACA TGGAAAAACC CTGTCTCAA 210

SEQ ID NO:4001

LENGTH:209

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04728

SEQUENCE DESCRIPTION:

GATCAGCATT CATAACCATAG TAACTGATGT TGAAAACAGC ACAAAATAAC CAGAAGTTGA 60  
AAATGGCAAT AACATGCTAA AAATTTGCAA GTCAATTGTA NNACACTTGT CCAAATCTTG 120  
ATTTTTTTC CTTCTCTATC GTTCCCCCCC CACCACCCAGC TTTATGGAGG TATAATTAGC 180  
AAATAAAAAG TATACATATT TAAGGTAAA 209

SEQ ID NO:4002

LENGTH:209

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04729

01286

## SEQUENCE DESCRIPTION:

GATCCTATGA ATTAATTCAG AAAGCAACTA AAATAACAAT GGCTGCCAA ATGTCATTT 60  
 GTAAATATAC GTCTATGACT TTAGGAGCTG TCCTGGTTG AAAACATGAG GACAGTTAT 120  
 CCATTGGATG CCATCTATNT AGTCCCATT AAGAAAGTTG TTTTTGTG AGAATGACCA 180  
 AGGTAAATTT AAATATACCA TTCAAACAN 209

SEQ ID NO:4003

LENGTH:208

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04730

## SEQUENCE DESCRIPTION:

GATCGATGAA GCACTTTTT ATTAAATATTT TCCTTTGTTA AAGGAGGAAC CGTAACCTC 60  
 CATACTGTA CATATAACCC TTTCTCCTA AAGAGGAGTC AGTCAGTGCT CCTATATTT 120  
 TCATTTTTG TCAAAGCAAG AAGTAAATAC TTTAGAATTG TTAAATATAT AAATAAAGCA 180  
 AATAAAGTTG AGTGTCCAC ATGGTAAA 208

SEQ ID NO:4004

LENGTH:207

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04732

## SEQUENCE DESCRIPTION:

GATCTTCCA CATAACACTAC ATTGTATTGT TCAAAATTCA TAGAAATNAC TTGCAATATA 60  
 TTGATTTAAG CCTTATGTAG TGACTGTTGC TATATTTAA GTAGCATTG NAGTTGCTG 120  
 TTTTCCTCA CTGCTTAATC CTACAAAAAC CAGCCATCTG CCTAAAAAAAT AAAAGAGCAA 180  
 AANTGNATCA GTGCAACCGG TATACGN 207

SEQ ID NO:4005

LENGTH:207

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04733

## SEQUENCE DESCRIPTION:

GATCCACATC TCAAAGAAGT GGGACTTCAC CAAGGTNCAA TGCTGATGAA TTTGAACNCA 60  
 TGGTGGCTGA AAAGGGCTC ATCCCANGAT GGCTGTGGGG CAAGTCATCC CAGTCGTGGC 120  
 CTATGGCAAG TNNGGGCCT NACTCATGAG GGCTTCAATG TGCTGCCCTC TCTTAATACT 180  
 CACCAATAAA TTCTACTTCT GTCCAAA 207

SEQ ID NO:4006

LENGTH:205

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04734

## SEQUENCE DESCRIPTION:

GATCTACATT ATTCAAGCAGC CTCGAAAATG TTAAGCCTGG ATTTAAAACA CAGCCGTCTG 60  
 GCCAGCTGCC TCGAATATCT GACAGCTTAG CAAAAAGGGC CANAGCTTTC CATAGGCCTG 120  
 CTGCACTTGC TTGGTAAATT AAGCAGCTTT TGTATCTTCC CCTTGACTT TAGGTAATAA 180  
 AGCATCCAAA CTTGTAATC TGAAA 205

SEQ ID NO:4007

LENGTH:204

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04735

SEQUENCE DESCRIPTION:

GATCTGGAT AAAACCAGAC TGAAAGGAAT ACCTCAGAAG AGATGCTTCA TTGAGTGTTC 60  
 ATTAAACAC ACATGTATTT TGTATTATT TTACATTTAA ATTCCCACAG CAAATAGAAA 120  
 ATAATTATC ATACTGTAC AATTAACTGA AGAATTGATA ATAATCTGAAT GTGAAACATC 180  
 AATAAAGACC ACTTAATGCA CAAA 204

SEQ ID NO:4008

LENGTH:203

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04736

SEQUENCE DESCRIPTION:

GATCTNCTT TTATCACTAT AGTTTGATT CCTAGAATTG TATATAAATG GAATCCAACG 60  
 GGCACAGTGA CACATGCTG TAGTTCCAGC TACTTGAGAG GCTGAGGTGG GAGGATTCC 120  
 TCAGCCCAGT TCAAGGCTGC AATGAGCTAT GACCACGCCT ATGCACTNCA GCCTGGCAA 180  
 TATAACAAGA CCCTATATCT AAA 203

SEQ ID NO:4009

LENGTH:202

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04737

SEQUENCE DESCRIPTION:

GATCTGAAA GAATTNTAT TTTAATTGGG TTGAGGGAGA GTAGATACAA TGAAACCTTA 60  
 AATTCAGCT TTNATTCTAA ACCCTTTAAT TTTTATGGG TTATGTTTA CTTGGCAAAA 120  
 CTATCTGTGT TTCTNTCTTA GTGATATAGC ACCCTTAAAG TAACCTGAGT GGTAAGGAA 180  
 ATAAAATACA CCAGTTTCA AA 202

SEQ ID NO:4010

LENGTH:201

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04738

SEQUENCE DESCRIPTION:

GATCCTCTTC CTGCTCCAGT TGCTGGCGA CCACGTCCCT GGCGTTGCC TGGTCACAAG 60

2153480

GCCGCTCATG GATTACTTGC CCACCTGGCA GAAAATCTAC TTCTACAGTT GGGGCTGACA 120  
GACCTCCCG AAGGAGGGTG TGGGGAGGGG TGGGGCAGGG AGCCCCTCTT CCCTAATAAA 180  
ACTGACTCCG GCAGCGTCAA A 201

SEQ ID NO:4011

LENGTH:201

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04739

SEQUENCE DESCRIPTION:

GATCCTATTT GTACAAAAAA ATGTAAAAT TAAAATTGCA CAAAATTGT NACCTGTACC 60  
AGCTTTAGA ACTGTTTATC TTATCCTCCT CAGTGATACA TCATGAAGTT GTGTGCTTG 120  
CCTAAAATGC CCAGTTACCT GAAATTGTAT AAATNCTTGC CAAAAGTGT TGAACCTTAAT 180  
ACAAACTTCC CATCTCTTAA A 201

SEQ ID NO:4012

LENGTH:201

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04740

SEQUENCE DESCRIPTION:

GATCTCATTT TATTAGCAT CAGCTCAAGA AACTNAAGTC TTAGTGCACA GTATCACAAAC 60  
AAAGAAAAAG CTTTGTAAAA ATAATGGTA AAAACAAGAA AAGATTCTCA TCAAAATGAA 120  
AATATAAAAT TAATCATTC TCACCAAAGA GTATGCCTGG GAGCCTCCAG CTGTTAAAAG 180  
NCAATGCTAT TACTACTTCT N 201

SEQ ID NO:4013

LENGTH:200

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04741

SEQUENCE DESCRIPTION:

GATCCAAGTT GCCCTGGGG TATAAAACTT GACAGCAGAG GGC GTTCAGG GTCCCTCAGC 60  
TGCAGTGTGA AGTGGGACAC ACAGGTGAGA CTCCATCTGC CCTGGGCAGG TTCTGAGCC 120  
TTNGGGGACCC AGTTCACCCCT ACATCCCAGG CTTCTGTTGT CCCTGCCTG CCTGTAAGGA 180  
ATAAAGTTGC TTTGCTTAA A 200

SEQ ID NO:4014

LENGTH:200

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04742

SEQUENCE DESCRIPTION:

GATCTGACCT TTTCTTCAGA TACATAAGCA TTATTTCTC TGTTTAGGTC CAAGGAAAAA 60  
CAAAAGGTAA AGGNAATAAA GGGAAATATAC ATAAGGCAA CATTCTCTT TTTTTTTGC 120

01289

2153480

ATTATATCTT ACCAATTAAT TAAATTGTGG CCTTTGTTAT TATAAATGTA ATGATTCA 180  
AAACTATATT ATGTAATAAA 200

SEQ ID NO:4015

LENGTH:200

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04743

SEQUENCE DESCRIPTION:

GATCCTATGA CTGACATCAA CTAAAATTAA AAAGAACAGG AAGACTCACT TGGAATTT 60  
TNCCATGAGG AAAATGTGCT TTGGTGCAAG GTACAAGGCC CACACCCCTCT CTGAGAGATA 120  
CTATGATTAA AAAAGCTTAA TATCTTGGGA TTTNCACAA CTGATAATGT GCAAAGNTAT 180  
AACNGATTA ACTTGTCAAA 200

SEQ ID NO:4016

LENGTH:200

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04744

SEQUENCE DESCRIPTION:

GATCTTCAA GAATGAACCA AGGNNTTTAA AAAGAATTAT AGGAAACACT TCATTCTTA 60  
TAAAACCTTC TATAATGCCT TATTGATG TTAATCTTAT GTGCTTCTA AAAATGTTG 120  
TGAAATACCA AACTTATGGA TTATCACTAG GTTATCAAGC ATATATNAGT CTTTATCAGA 180  
NTAAAATGAA ATTNCATAAA 200

SEQ ID NO:4017

LENGTH:199

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04745

SEQUENCE DESCRIPTION:

GATCTGAGAG GCAGTAAAGC AGTGATGAAG ACAGTGCAGC AGAACATTGA AGTCCTGATT 60  
GCAGCAGTGA CTCTGCAACC TTGGATAAAAT TATTCANTC TTTATTTGT AAAACGGAGA 120  
TAACGGCTA TAGGATTNTN AAGACTGANT ATTTAAAAG NGCTTAGAAT GGTGCCTGAC 180  
AAATGAGNNN CANTAAATN 199

SEQ ID NO:4018

LENGTH:199

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04746

SEQUENCE DESCRIPTION:

GATCATGTGA TTTCTATTTTC TNCCCCACAG GGTAAGGGAC GAGTCTTCTG GAAGGCTCTG 60  
CCATGGACAT TTGTCCCTCGG GCTCAGAGGC CCCACCCCTGC CCCACACCTG CCCCTAATCA 120  
CTGCAGTGTGTC CAGCCCAGTG TTGAACAGAT TGTAGCGTTC TGTCTCATTG CGAGCAAATA 180

01290

AATAGACTTT CATTGGAAA

199

SEQ ID NO:4019

LENGTH:198

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04747

SEQUENCE DESCRIPTION:

GATCACGCGG CATGTATTGA GGTGTGGCAT GCAGCATTAA GGAAGGAAAA TTGAAGACGT 60  
 GTTCAAGAAA ACATGAACAG AAGCAAATNA TGAAAATGAG CATTTCATT GATGTTGATA 120  
 ACATCACAAT AAATTATGGA GAAAATACA TATTGGCTA ACTTTAATT GCTGANCAAT 180  
 AAAGTGTGTTT CTTTTAAA 198

SEQ ID NO:4020

LENGTH:196

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04748

SEQUENCE DESCRIPTION:

GATCCCTACC GCCAGCTGCG AGAGAAGGAC CCCAAGTACA GTGCTCTCCG CCAGAATTTC 60  
 TTCCGCTACC ATGGGCTGTC CTCTCTTGC AATCTGGGCT GCGTCCTGAG CAATGGGCTC 120  
 TGTCTCNCTG GCCTTGCCCT GGAAATAAGG AGCCTCTAGC ATGGGCCCTG CATGCTAATA 180  
 AATGCTTCTT CAGAAA 196

SEQ ID NO:4021

LENGTH:196

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04750

SEQUENCE DESCRIPTION:

GATCATGAAG AAGCAGGGCC TCTACCTACA AAAGTNAATC TTGCTCATTC TGAAATTAA 60  
 GCATTTTCTT TTTAAAAGAC AAGTGTAAATA GACATCTAAA ATTCCACTCC TCATAGAGCT 120  
 TTTAAAATGG TTTCATTGGA TATAGGCCTT AAGAAATCAC TATAAAATGC AAATAAAGTT 180  
 ACTCAAATCT GTGAAA 196

SEQ ID NO:4022

LENGTH:195

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04751

SEQUENCE DESCRIPTION:

GATCTGGTTC CAGGGAAAAA AAATAGCTGG TTGGTGTCTA GCCCCCAAC ACTTTGTCT 60  
 GTTGTGTATA AAAGAAGAAA GACTGGCATG TACCTTCATT TGCTTAGCTA TTTGAGTATC 120  
 TAGAGAAAAA TTAAATGCA ATGAGTTAGC AGTATACCTT GGCACACTTA ATAAATTAAA 180  
 CATTGTGGA GCAA 195

SEQ ID NO:4023

LENGTH:194

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04752

SEQUENCE DESCRIPTION:

GATCTAGAAG CTGGTAAAAAA TGACAATATC AATCACATTA GGGGAACCAT TGTGTCCTTC 60  
ACTTAATCCA TTTAGCACTA TTTAAAATAA GCACACCAAG TTATATGACT AATATAACCT 120  
GAAAATTTT TATACTGAGG GGTTGGTGAT AACTCTTGAG GATGTAATGC ATTANTAAAA 180  
ATCAACTCAT CAAA 194

SEQ ID NO:4024

LENGTH:193

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04753

SEQUENCE DESCRIPTION:

GATCCAACAG CAACACCATT TTTAAATTAT TGTGAAAAGA TTAACTGGCA ATGTACAGAG 60  
TTTACTCAAA GCCCTCTTA AGGGAAAACA CTACAAAAAG TCACAAGGAT ACCAAATGGA 120  
AACACATGAT GATGCCCTCTG GGCTGTATG AGACCGTGAT GAAGTAGAAA TAAAGCCCTT 180  
CTGAGATGGC AAA 193

SEQ ID NO:4025

LENGTH:191

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04754

SEQUENCE DESCRIPTION:

GATCCACGGT GGGCTCCAGC TGCCAAGNCA CCCAAGGGAG TCTGGGCCCT AGGCCTAGCC 60  
CCATCCCTCC CCATGAGGGG CCAAGACACT GCCTAAGGTG TGGGAGGGAC TGGCTGAGAT 120  
TGCAGCCCAT GGTAGGAGCT GGACCAACTG TATATAGTTT TCAATAAACT TTTCCCTTT 180  
CTGTTCTCAA A 191

SEQ ID NO:4026

LENGTH:264

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04755

SEQUENCE DESCRIPTION:

GATCCAGGAA GTGGTGAAC CATCTAAAGA AGAGAAGGCT GTGGCCAAGT ATCTTCGATT 60  
CAACTGTCCA ACAAAAGTCCA CCAATATNAT GGGTCACCGG GTTGATTATT TNATTGCTTC 120  
AAAAGCAGTG GACTGTCTNT TGGATTCAA GTGGGCAAAG GCCAAGAAAG GNGAGGAAGC 180  
TTTATTTACA NCCAGGGAGT CTNTGGTTGA CTACTGCAAC CAGGCTTTA AAGTAGCAGT 240  
TTNTTTCACC GAGCCCTAAA GGTN 264

2153480

SEQ ID NO:4027

LENGTH:186

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04756

SEQUENCE DESCRIPTION:

GATCTTCACA TATTTATATAT GNATATATAT ATCAAGAAGT TATATATATA TAACTCAAGA 60  
AACTCAAGTT ATATATATAT GTCAAGAAAT GTATGATTAT TTTGGAGAGA ATGGGCCCAA 120  
ATGTGAAAAA GATATAAAA AAACAAAAAA AACNNAAAAA AAACCNCTNT TTNCCTNC 180  
GNANTN 186

SEQ ID NO:4028

LENGTH:150

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04757

SEQUENCE DESCRIPTION:

GATCTGGAAG TCACCCCTCT CTGGCCCACG GAAAATTTG GTAATCTTCT AGGTTCTAAA 60  
ATGAAGATGT ATGGGTACTC TGGCAGACTG CATGTTGTAT AATTGAAAA ATACTAAAAG 120  
TGGAAAATAA AATTGAATTA AACTTTGAAA 150

SEQ ID NO:4029

LENGTH:186

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04758

SEQUENCE DESCRIPTION:

GATCAACAAG TTCAAAACAC TGCTAAGTCT AAATCTAAA CAGACCAAGA GTACCTTCAT 60  
TTAACNTTAG CTTGCACAGA GCTTGATGCC TATCCTNCAT TCTTNCAGA AGTAAAGATA 120  
ATTATGGCAC TTATGCCAA NTTCAATTATT TAATAANGTT TTACTTGAGG TAACATTACT 180  
GATTTN 186

SEQ ID NO:4030

LENGTH:183

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04759

SEQUENCE DESCRIPTION:

GATCCAACAC AGAGACAATA GAAACATTGG GATTGAAGAG ATTCTTGGGA CTGTAAAAAT 60  
CCCAAGAATA TGGGATTGTA AAAAACCTGT CATCTTACTG CTATGATAGA TGAAGATTT 120  
GCTTGCTAT ACCTTGTNGC TATCCTCTC TTCCTTCCT CCAAATATAC TTGTAGGTAT 180  
AAA 183

SEQ ID NO:4031

01293

2153480

LENGTH:183

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04760

SEQUENCE DESCRIPTION:

GATCTAGCAT TTTAATTCT AGCATTGCTA TTCACCGGCT TCCTTATTT ATATGTAAAA 60  
ATTAAGAGTT TATATTTAAT CTTCTTGTT CTCATAGATA TTTTGTGAGC ATTTNTTGT 120  
TTATTTGAA GAAATGTGGA TAAGATACTT GGTAGTATAA AACAGNCTCT CTGAGAGTAT 180  
TTN 183

SEQ ID NO:4032

LENGTH:182

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04761

SEQUENCE DESCRIPTION:

GATCAAGGTC TGTATATTAT CCCAAACTTT ATTAAGAATT GTTTCTAAT TNGTTATAAC 60  
ATTTTNAAT TAATAGTTTC AAAACAAATT GTTAATACAA CTGTATAAAA TGAACATAAT 120  
TTCCCTCACT TGTATTTTG TTATTGAGCA AGTTTATCAA AATAAATNGT CTACTAAAGA 180  
AA 182

SEQ ID NO:4033

LENGTH:181

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04762

SEQUENCE DESCRIPTION:

GATCTCTTAT CAATTAGCAC TCACTAATGT ACTACTAATT GAGCAACCTA CGCACTCAGT 60  
TGACTACGTA AATCTGTCAG GTCTTTGTG ATTCCTCTG ATGCAGGAGA GGAAAATTG 120  
TAATTGATGA AAATAATGAA TGAAAATCAA CAGATGAATA AATGGTTCTT TATAAGTGAA 180  
A 181

SEQ ID NO:4034

LENGTH:180

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04763

SEQUENCE DESCRIPTION:

GATCTGGAGT CCCACGTTCC CCAAGGCCAG CGGGATGTGT GCCCCCTCCTC CTCCCAACTC 60  
ATCTTCAGG AACACGAGGA TTCTTGCTTT CTGGAAAAGT GTCCCAGCTT AGGGATAAGT 120  
GTCTAGCAC AATGGGGCA CACATTAGGT GCTTAATAAA TGCTGGATGG ATGCAGGAAA 180

SEQ ID NO:4035

LENGTH:180

TYPE:nucleic acid

01294

TOPOLOGY: linear

CLONE:HUMGS04764

SEQUENCE DESCRIPTION:

GATCCTGTTT GTACAAAGTC TTGCTTTAT AAGGTTCAA TAATATCTAA ACAACACAT 60  
TAAAAAGCTG AGACCATTAA ATGAAGATAA TTGTTGTAA TCATAGGTGT TGAAAGTAAA 120  
AAGGTGCCAT CTTGTGGTAT TGACTTGTAT TTATAACAAA TAAACTGCTC AAGAGACAAA 180

SEQ ID NO:4036

LENGTH:180

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04765

SEQUENCE DESCRIPTION:

GATCCTGGTT ACAGCCATT TGTGTGATTG ACTTCGGGGG TTAAGTAATG CAGGATTCTG 60  
CAAACAAGGT GTCGCCGTCC AAATGTACTG TCCTGGCATA GAGAGCACTG CTTTGTTC 120  
CACTGTTGTA GAGAAAACCA GGGAGAACTT TATTTTCAA TAAACTTTTC TTGTGTGAAA 180

SEQ ID NO:4037

LENGTH:178

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04766

SEQUENCE DESCRIPTION:

GATCATGTAT AAAAGAAAAA AAAAGAAAGTC ATGCTNTGTC GCCAATTATA ATTNTNNCA 60  
AAGACTTTGT CACAAAACGT TCTATATTAG ACATTTGGA GGGACCAGGA AATGTAAGAC 120  
ACCAAATCCT CCATCTNTNC AGTGTGCCTG ATGTCACCTN ATGATTGCT GTTACTNN 178

SEQ ID NO:4038

LENGTH:177

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04767

SEQUENCE DESCRIPTION:

GATCAGGATT TGGGAAATT GTGGTCAATA TTTGATTTC CTTTCTGTT TGATAGCCTT 60  
ATCTAAATTC CCCTAGCTTG AATGTAGTAA ATATGAGTGT GTAAAAATGT GTATCTAATT 120  
CACCTCTTNG GGGAGGTTA ATGTAACAT AAATAAAAAT TCTTCCCCA GGTTAAA 177

SEQ ID NO:4039

LENGTH:175

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04768

SEQUENCE DESCRIPTION:

GATCTTACCT CCTAACCAAC TCCATACATC ATGACCAATG GCTCAGTCGA AGCNGTCATC 60  
TCTTGCTTGG TCACTGCAGG TACTTGCTAA CTTTCTTCCC AATAATCCAA CCCCCACAGA 120

2153480

GCAGCCAGAG TAGCCTTTT TTGTTTGTT TTGTTTGTT TTGTN 175

SEQ ID NO:4040

LENGTH:175

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04769

SEQUENCE DESCRIPTION:

GATCTTAATA GCTAAAATATT GAAAAAATATT TGGNAAGTCT GAAATNAGGT CTCCTGGCCC 60  
TGGTGTGCC TTAATGCCCTG TNACAGTTGG CCTCTGTGAA TATTGGTATA ATTNTAAATA 120  
ATGTCAAAC CCATTTNTA GCAAGTATTA ATAATTAAGG GAAGTATGTC TGAAA 175

SEQ ID NO:4041

LENGTH:174

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04770

SEQUENCE DESCRIPTION:

GATCCTCAGG ATATGCAGGG CTCAAGAGAA ATGAAATATC TTGGGGATAT GGTTACTTAA 60  
GACGTGATAC TGTCACAGTG AATTCACAG AAGATGGTGC TGCCCTAAT GAGGTTCAAT 120  
CCATGTATAA GCCAGACCAA TCTGAAGACA AATAAAGTAT TTCACAGCCA CAAA 174

SEQ ID NO:4042

LENGTH:171

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04771

SEQUENCE DESCRIPTION:

GATCTTCAAA CATTAACCTA AGCAGACCAA AAATTCTGAT GACCGCATCT AGATTATTTT 60  
TTTATAAAAA TGATTTCAC TATAGCTATG TTACGCTAAG CTACTGTCCA ATCTCTGTG 120  
ATGTGTAACT TTACATGTG AATATTAAG TAGATTCTC TGTCTTGTAA A 171

SEQ ID NO:4043

LENGTH:170

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04772

SEQUENCE DESCRIPTION:

GATCTTAAA GATGTGCTAA ATGACTTTT TGGCCAAAGG CTTAGTTGTG AAAAATATAA 60  
TTTTAAATT ATACATTCAA GGTAGTGGCC AAATGTAACA CATCAATCAT GGAATGATTN 120  
CTCTGCTAAC AGCCGNCTGT ATGTTCAAT NAATTGTCC AAAGCTCAA 170

SEQ ID NO:4044

LENGTH:169

TYPE:nucleic acid

01296

TOPOLOGY: linear

CLONE:HUMGS04773

SEQUENCE DESCRIPTION:

GATCCTTCCC AGTGGACAGA TGAAGAATT A GGTATCCCTC CTGATGATGA AGACTGAAGN 60  
 TGTTAGACTCA GCCTCACTCT GTACAAGAGC CAGGTGAGAA TTTCAAGGAT TATCGACTTC 120  
 ATATTGCACA TTAAAGTTAC AAATTAAGT GGCTTGGTCA AGAATGAAA 169

SEQ ID NO:4045

LENGTH:169

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04774

SEQUENCE DESCRIPTION:

GATCTAGTGT GTAGTGAGCT CAGTATAGAG GACAGAGCTT TCATCATGTA AATTNATATG 60  
 CAAAGCCAAA TNAAACGTGG TGTGTACTTC CTACTGATGC GTCAGGGTAT AGGCCTCTT 120  
 TTCTGCCATT CAAATAATGG AAGTTAATTA AATTTAAC AC AAATGTAAA 169

SEQ ID NO:4046

LENGTH:169

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04775

SEQUENCE DESCRIPTION:

GATCCATACT GAAAAAATNC TGAGCCAGCC ATCTTGGCA AAGNNCCCTG AGCTCTTGCT 60  
 ATCTCTCAAG AGTGCTGAGA NCCACGGTGA AAGTNCTGCT CTAGGCCCCAC AAGTGTAACT 120  
 ATGCTGTTAA CAGCTGTCAA TAGATAATTA AAATTCATAC TGTATGAAA 169

SEQ ID NO:4047

LENGTH:168

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04776

SEQUENCE DESCRIPTION:

GATCTCTGTT CTNGNTGAA TGTATTTAAT TTCCAGCAGA ATGAGCCCCA TTCCTTATTT 60  
 TGATTGGCCA TTTATCATGT ACATATGGTG AAATGCCTAT TCGTGACTTA GCCAATGTTG 120  
 TTTCTTTTC TTACTGATTA CTACAGTACA TTTTATATG AAAGCAAA 168

SEQ ID NO:4048

LENGTH:212

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04777

SEQUENCE DESCRIPTION:

GATCTGCTGA AGCATCTGTC CAGCTGGTAT CCTGTGAAAG TTTGTAATT NCTGAGTAGA 60  
 CATTCTTATA GAGTATTGTC TTTAAAATCA GATTGTCTCT NCTATATTGA AAGCATTNN 120

2153480

ATGTTTNCNA ATTTAAAAAT TAATATTC C TTATAGATAT TGTGCAATAA AGCTGAAGTA 180  
GAATGTGTGG TTTTGCAAA TNCTTAGCG GN 212

SEQ ID NO:4049

LENGTH:167

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04778

SEQUENCE DESCRIPTION:

GATCTTGCT CACAAAATAA ATTAAAAAGA TTTTAAATA GCAGGTTCT AAAACAATGA 60  
GAAAGACAGC ATTACATATC AGTGTCTACA ATTTAAACAA AGCTATACTT AGAAGTAAAT 120  
TCATTGTCTT AACTGCTTT GTTCCAATAA AACAAAATAG CAGGAAA 167

SEQ ID NO:4050

LENGTH:176

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04779

SEQUENCE DESCRIPTION:

GATCGTTACT ATGTGTCAAA GGGTTGGAG AACATTGATT AAGGAAGCAT NTTCTGATT 60  
GATGAAAAAA ATAACTCAGT TATGCCATC TACCCCTGCT AGAAGGTTAC AGTGTATTAT 120  
GTAGCATGCA ATGTGTATG TAGTGTCAA TAAAAATAA ATGAAAAAAA TGCAAA 176

SEQ ID NO:4051

LENGTH:166

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04780

SEQUENCE DESCRIPTION:

GATCTATAAC TGTACTTTGC CTGGCGCTGT GCGAAGGTCA GAAAACCTAC TGCTAGTACC 60  
TAGAACACACA CAAGGCTGCC CAGCCAAATC TTAATGTAAA GTAGCTAGAG CCATGGAAGT 120  
ACAGTATGAA TAAAAAGAA AAANGTATTG ANCTCAAAT TCTAAA 166

SEQ ID NO:4052

LENGTH:163

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04781

SEQUENCE DESCRIPTION:

GATCTTGTAATAGGAAAGC TGTAACATAA AATTGTATTG TTTGCTTATT AGCCATGTAT 60  
CTCTTAAAT TTTGTTATGT TTACAACGAT GTACCTTATT GGCAACAAGT TATTAGTTG 120  
ATGTTAACAA ATAGTGCCTT TAGTAAATNA TTTTACAAT AAA 163

SEQ ID NO:4053

LENGTH:162

01298

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TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04782

SEQUENCE DESCRIPTION:

GATCCAAAAG CTGGCTNTCT AACCAACCAGC CAAGGGCTCT CTTCACCAAC AAGCCAACTC 60  
TCAGGGCAGC AGCAATGTGT ACCTTATTAA CCTCTGCACC CNAGGTCTA GCACAGGGCT 120  
NGTCCATAAC AGGCGNCCAA TAAACATGTG TCATAATCTA AA 162

SEQ ID NO:4054

LENGTH:161

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04783

SEQUENCE DESCRIPTION:

GATCCCTGGT CCTGCCGACA CGCAGCTACT GAGAAGACCA AAAGAGGTGT GTGTNTGTCT 60  
ATGTGTGTGT TTCAGCACTT TGTAATAGC AAGAAGCTGT ACAGATTCTA GTTAATGTTG 120  
TGAATAACAT CAATTAATGT AACTAGTTAA TTACTATGAA A 161

SEQ ID NO:4055

LENGTH:159

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04784

SEQUENCE DESCRIPTION:

GATCGGCACC ACACCAAGACA TAATCCTGGA CGACTTGCTG GAGACGGACC GCGTCACCGC 60  
CCACTTCTAG CCCCGTGGAT GCCGTCACCA CCAGCACACG GAACTACCTC CCACCCCCCTT 120  
TTTGTACAAA ACACAAGGAA AAACATTTTT TGCTTGAAA 159

SEQ ID NO:4056

LENGTH:159

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04785

SEQUENCE DESCRIPTION:

GATCTAATTTC TTTTGATAAA GTTCTAGCTC TAAAAGTGT AGTGGGACTG TATGTTTCT 60  
GATACTGGTG GCTTATGTTA TTAANCCTT TTTAAAAAAAG GTCCACTCTA AAGGCTGANN 120  
NCCACCCCTAN GTTTCCAGCC TCCTGGCCTC NACCNGGN 159

SEQ ID NO:4057

LENGTH:158

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04786

SEQUENCE DESCRIPTION:

GATCTTGTTGT TCTTTGTGCC AATATGAAAA GGAGAGGGTT GGTTCTTCC TTTATTGTTG 60

01299

AATGCTCCA TTTAATGCTT TATGGCTTT ACTGTATTAC TTTTTAGAC TCCCGTCTGC 120  
 ACAAAATGCA ATAAAAATAA TTTTATTATA CCCTTAAA 158

SEQ ID NO:4058

LENGTH:158

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04787

SEQUENCE DESCRIPTION:

GATCACACTG GGGAAAAGTG ACAGAACCAA ATTCAAACT CCAGTCTTC TGCTTCTAGA 60  
 GATTGAACTA CTAACATCTG CATTATATAA AATTAAGTNT CTCAAGGTAG TTTGTGAAACG 120  
 TAACATACAA ATAAGTGATT AAAATTTNG GTGATAAA 158

SEQ ID NO:4059

LENGTH:308

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04788

SEQUENCE DESCRIPTION:

GATCCCAAGT GATTAATAA GGGTTTCTGA ATGGATGTTG AATGGCGTGG ACTCGCTACT 60  
 CCGTTCTTCA CAGCTGCCTT CCAGAAATGTG TTCAAAAGAA AGACAAGAAG GAGTGTATGG 120  
 CTTATAAAAGT GAATCTAATA CAGTATTTGT TGCATTTAAA CAAACTAGAC ATTTCTTAC 180  
 GGAAAANTTA TGAAATACAG CATATTTNAT GTNCTCCCAT TGACTCAATC ATGACAATAT 240  
 TTCTGTTTA ACACCACATT TCATGATTAG NAATGTTGT NATGGAAAT GTTACACCAT 300  
 GTAAATAN 308

SEQ ID NO:4060

LENGTH:155

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04789

SEQUENCE DESCRIPTION:

GATCAGCCCC AGATTTGACG TGCACCTAAA GACCTGGAAA AATGGCAGAA TAATCTGCTT 60  
 CCATCCCCCC AGTTTGGTTT CATTGTACCT GACCACCCCTC ACNGGCAANC ATGGACCCAT 120  
 GAAGNAGCAA NNCGGAAACN CACNAGAGGG AAAAN 155

SEQ ID NO:4061

LENGTH:155

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04790

SEQUENCE DESCRIPTION:

GATCTCATTA GTATGTTTT TAATGTGTAG AATTAACACT TTAAAATAA CAGGTGTGAA 60  
 AATTATAAG GAATATATAT GACAATTATT TNCTGTACAT TAATGTCTAA ACATTATACT 120  
 TACTTTCCA TAATAAAGGA AATTTGGAA CCAA 155

2153480

SEQ ID NO:4062

LENGTH:155

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04791

SEQUENCE DESCRIPTION:

GATCTAAAAA CCCAACAGAT TATATTGAA GGGGCACAGC AAACAGTGCA AGAAAATCTG 60

CTGATGGAAG ATNATTTNA TCAGTCCTCA GANCCAGAAA CTATAAAACT GGGAAAGGAAA 120

GTTTAAATAA AGANTTTATT TCCAAATTCA GCAAA 155

SEQ ID NO:4063

LENGTH:153

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04792

SEQUENCE DESCRIPTION:

GATCTAAGNA GGATTCAACA CCTTTNTTG GTTGCTCAGT GTGTAATGAC TGAGATTGT 60

AAATCTTGT GAACATTCTG TACTGGTTCC CAAGAGCTAT TCATTCCCTG CTACCTGATT 120

TCAGCACAAAT AAATATACTT CTGCTGTGGG AAA 153

SEQ ID NO:4064

LENGTH:152

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04793

SEQUENCE DESCRIPTION:

GATCTTAGCT GTATGGAGTA ACTATTCAG AAAACCTAT AAGAAGTTCA TTTCTTTCA 60

AAAGTAACAG TATATTATTT GTACAGTGTAA GTATACAAAC CATTATGATT TATGCTACTT 120

AAAAATATTA AAATAGAGTG GTCTGTGTTA AA 152

SEQ ID NO:4065

LENGTH:149

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04794

SEQUENCE DESCRIPTION:

GATCAGAGAA GGCTGAAGAA GGTGGAGAAA CTNAGGCACA AAAAGAGGGC AGTGAAGATG 60

CGGGCAACCT CCCTGAAGCC CAGGAGAAGA ATGAAGAAGA AGGAGAGACA GCCACAGAAAG 120

AGACGGAAGA AATAGCCATG GAGGGTGCN 149

SEQ ID NO:4066

LENGTH:149

TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS04795

SEQUENCE DESCRIPTION:

GATCAACTAT GGGTTTATAT AAATNCCAAA TTTAGTACAA CAAATTAGG TCATCAGGTG 60  
AATAACAAGTA TTTTTTTAA CAGGNAACAT TTTATTATAN NAAAAATATT AATGATAAAC 120  
GCATATTGGT TGAAAATAT TTTTAACN 149

SEQ ID NO:4067

LENGTH:148

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04796

SEQUENCE DESCRIPTION:

GATCTCTGTG ACCCATACCC TATTTNTACA CTCCCTCCCC TTTTGAAAAT CACTAATAAA 60  
AAATTTNCTG GTTTATGGC TCAGGGGGCA TCACAGAACCG TGCCAAACATG TGATGTCTGC 120  
CCTGGACACC CAGCTTTAAA ATTCAAA 148

SEQ ID NO:4068

LENGTH:147

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04797

SEQUENCE DESCRIPTION:

GATCATTTC TTGGGACCTT GAACTGTGAA TGTTTGTCC TAACCATTAA ATATTTCTA 60  
GGTACTTGCT GCAAGTNCTT GAACTATTAA ACCAGCTTTA ACTTTGGGGC TCTTAGNTTC 120  
TNTNCTCCAG ATTCTTGTAA TNNNATN 147

SEQ ID NO:4069

LENGTH:148

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04798

SEQUENCE DESCRIPTION:

GATCAGAGAA GCAGATATTG ATTGAGACGG ACAAGTCAAC TATGAAGAAT TCGNACAGAT 60  
GATGACTGCA AAATGGAAGA CCTACTTCA ACTCCTTTT CCCCCCTCTA GAAGAATCAA 120  
ATTGAATCTT TTACTNACCT CTTGCAAA 148

SEQ ID NO:4070

LENGTH:149

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04799

SEQUENCE DESCRIPTION:

GATCTTCAC ACACGGTGA CCCTGAGAGA GGAGGGAGGA GGGAACCTGG CGGGGGTGTG 60  
TGAGGCCGCA CTGTCAGCTG GCCGGTCAA GCCTGTGGCT GGAGCTGGGG TCTGTTACC 120  
TAATAAGTC CCACAGGTGC CTCATTAAA 149

01302

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SEQ ID NO:4071

LENGTH:146

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04800

SEQUENCE DESCRIPTION:

GATCCCTTC AAGTCTCT GACCTTCCTT CTGCCCTCCA GCCTGGGTGA CAGAGCTAGA 60  
GTCTGTCTCA AATAATAATA ATAATACAAT AAATAAAATAA ATAAATAAT AAATAAAATAA 120  
ATAAAATAAAG TACGCTTCC ATTAAA 146

SEQ ID NO:4072

LENGTH:146

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04801

SEQUENCE DESCRIPTION:

GATCTCATAG AGCCCAGTTC TTAGAGTCAA CAAAGAGTT GATAGGAATT TACTAGGTCC 60  
AGGGAGAAAAA GGCAGTGGTT GGGGTTACTG GAAATTTGC TCATTTCTC TAATGACTGT 120  
ATGAATAAAA GTGAACCTAC TTGAAA 146

SEQ ID NO:4073

LENGTH:146

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04802

SEQUENCE DESCRIPTION:

GATCTGAACT TACAGACAGT TGCCAAATTT CTCTAGATAA GAAAATAAG AATAGAGGGA 60  
ACCTAACTGG ATAACAAAAAA AAAAGGAGAG AGAAAAATGC CATTGCAGTT AAAGGTTATT 120  
AAATAAAGCT TAGTGTCAAT GTCAA 146

SEQ ID NO:4074

LENGTH:146

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04803

SEQUENCE DESCRIPTION:

GATCAGGAGG GACCACAAGG ACAGGAGAAT TAGCAACGAG AGACTGGCTG GCACCAAGTNT 60  
TGGGAAAAGT TCAGAGTGAG CTCCATTCA GGTCTATTAA AAGGCCTTN TTGTCATTCA 120  
GTGATATGTG NCTGGCCCT GAGAAA 146

SEQ ID NO:4075

LENGTH:144

TYPE:nucleic acid

TOPOLOGY:linear

01303

2153480

CLONE:HUMGS04804

SEQUENCE DESCRIPTION:

GATCAAAAAA TTATTTTAT TTATCCTAGC TTTACGTGCA TCTCACGGAA ACAGGATACA 60  
CGGTGTATAT ATTATNATGC AGTCGTTGG AACTAGAATT TCAAAAAATT TTAATAAATA 120  
TGTTAACCT GTGCCTCTG GAAA 144

SEQ ID NO:4076

LENGTH:143

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04805

SEQUENCE DESCRIPTION:

GATCACTGGG CCTACCTGCA CTGTGGGCC AAGCCCTGTC TTTTCCCAA GCCCTCAAGC 60  
ACACGCATGA ATGTTCATCC CGACTTGGTA GGGGGCTTT CACCCTTACA AGATGGCAAA 120  
AGATTACAT TGCTTTTT AAA 143

SEQ ID NO:4077

LENGTH:143

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04806

SEQUENCE DESCRIPTION:

GATCTGTAT NNTTAGCAG TCAAGTGGGA TGGGCATTAT ATAAACAACG TTACAATGTA 60  
AGGAAAATCT NTAAGGNGAT GGGGAGAGAA AAAGGCAGCT GGTATAATCG GTTACTGCTG 120  
CTTAGTTCTA CTTAATTTN NNN 143

SEQ ID NO:4078

LENGTH:142

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04808

SEQUENCE DESCRIPTION:

GATCTGCCTC TCAGGAAAAA GTACTAACTT GTTCTTTTG TTCCTGGCTT TCATCAGTTT 60  
GTGAGATTTC TCTATTTTT TAAATATAA TTTTATTCT TTCAACAAAT ATAAAATAAA 120  
AAACAACTTT GGNNCANTGA AA 142

SEQ ID NO:4079

LENGTH:142

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04809

SEQUENCE DESCRIPTION:

GATCCTGGCT AACCTNGCC TATTAGATT CCTTCCTCTC ACCTGGACCT TCCCATTCA 60  
ATCATGCAGA TGGTTCTTT TTGTAAGAG TTCCGTTGC CTTCAATT TTAGAGAAAA 120  
TAAAGACTGC ATTCACTCA AA 142

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SEQ ID NO:4080

LENGTH:141

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04810

SEQUENCE DESCRIPTION:

GATCTTCTTC TCTCTGTCC ACCTATTAAT TGTTTACAAT ATTTGTTACA TCTTATGCAA 60  
AATACTTGAN TGGGCCATGG TGCCTTTTT CCTTGTNAGT ATTTAATTAA AAATGAATTG 120  
TTTGTCAATT GCAATGTTAA A 141

SEQ ID NO:4081

LENGTH:140

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04811

SEQUENCE DESCRIPTION:

GATCCCGTTT TCCCCATGAC AATGTTGTAG TGTCCCCAC CCCCCACCCCC CAGGCCTTGG 60  
TGCCTCTTGT ATCCCTAGTG CTCCATAGTT TGGCATTGAC ACGGTTTCGA AGTCATTAAA 120  
CTGGTTAGAC GTGTCTCAAA 140

SEQ ID NO:4082

LENGTH:138

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04812

SEQUENCE DESCRIPTION:

GATCTGTGCA GCAAACCAACC ATGGCACAGG TTTATCTATG GAACAAACCT GCACATCCTG 60  
CACGTGTACC CCTGAAATTA AAGTAAAAAT TGGAATAAAA ACATTTAAAA AGAAAAGAAA 120  
ACAAACAAACA ACAACAAA 138

SEQ ID NO:4083

LENGTH:138

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04813

SEQUENCE DESCRIPTION:

GATCTATCAA AGGAAAAGGA AACTGAGACC GAAAACCTAG GGTCTAAGTT GTTCTAAACC 60  
CAGGGTTCTC AAATGTGTTG TACAAAAAGT TTCATGTAAT AAAATTAAGC AAATAAAACA 120  
AATGAATAGA GGTCCAAA 138

SEQ ID NO:4084

LENGTH:137

TYPE:nucleic acid

TOPOLOGY:linear

01305

2153480

CLONE:HUMGS04814

SEQUENCE DESCRIPTION:

GATCACAAATG TCATTCCTA ATACAAGGCA GGATATGTGG GAAGAATATG TACAATTATT 60  
TGATTAATAT TATTTCCAC TGACCTAACAC TTTCAGTGAT TTGTGGAAA AATAAATAAA 120  
TGTCTACAC CAAGAAA

137

SEQ ID NO:4085

LENGTH:137

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04815

SEQUENCE DESCRIPTION:

GATCCACTGC CTCAGCCTCC CAAAGTGCTG GGATTATAGA CATTGATGAT GAATTCTTAT 60  
TTTANNNTA ATATAAAGCA AATACAATTA TTGTTAGATA ACAATGCACA AAATAAAATT 120  
CAAGGGTGAA AAATAAA

137

SEQ ID NO:4086

LENGTH:136

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04816

SEQUENCE DESCRIPTION:

GATCCATGCC TGTAGTCAA GCTACTCAGG AGTCCGAGGC ACAAGAATTG CTTGAACCTG 60  
GGAGGCAGAG GTCACAGTGA ACCATGTTCT GTCACTGCAC TACATCCTGG GTGACAGAGC 120  
GAGACTCCAT CTCAAA

136

SEQ ID NO:4087

LENGTH:136

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04817

SEQUENCE DESCRIPTION:

GATCTGGTCC CTGTAGCACA GAGGTCCGAA GAACCGCCTT CAGAAAGAGG AGGCATATTT 60  
GGAAGTNATG GGAAAGACTT TNTGGACAAG GATGGAGAAC ACTTTGGAAA ATTGCATTGT 120  
GCCAAGAGAC AACAAAN

136

SEQ ID NO:4088

LENGTH:135

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04818

SEQUENCE DESCRIPTION:

GATCTACAAAC ACCTGCCAGT GACCCCTGCC CAAGGCCTAC CCCAGTTCT AGCACTGCC 60  
CACATGCATG TCTGCCTATG CACTGAAGAG CTCTGGCCC GGCAGGCCAC CAATAAACCA 120  
GTGTGAACCC CCAAA

135

01306

2153480

SEQ ID NO:4089

LENGTH:133

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04819

SEQUENCE DESCRIPTION:

GATCTGCTGA CAGTGAGTAG TATTTGTT TAGGATGTT TGACTTAGCA AAAATAATAC 60

AGATGTCTTC CCCCCTTTG TAGCTTGAC AATTGAATT AGATTCAAA TAAAATCTGA 120

ACAGAAA ACT AAA 133

SEQ ID NO:4090

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04820

SEQUENCE DESCRIPTION:

GATCCTTACA TATGCCATCC TTCTGTGTCA TTTGTGGCT GTTCTGTGTT TTTCTCCTA 60

GTTATTTATT ATTGTTAATA ACTTACTTT TCTTACATTC TGTTGTAAAT AAAATACAAA 120

GCAATCTTCA AA 132

SEQ ID NO:4091

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04821

SEQUENCE DESCRIPTION:

GATCAAACAG AGGCATGCTA AGATATATTG GGGCTTGAAG CAAAGGGAAA ACTATTTGTT 60

GCTATATGTT TGTAGGGATT TTTGCCAGT TTTAAAATA CATGTATCAT AAAGTTACT 120

ATCTCAGCCA AA 132

SEQ ID NO:4092

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04822

SEQUENCE DESCRIPTION:

GATCAGTGGG GGAGGGCACC TCAGCACCT CTGAGTGTGG ACAATAGCTG CTTTCTTC 60

TATCCAAGAG CACCAGGCTG TGCTTGGNTC CTTGCTCTCA GAGTCTATAA ATAAAAGAAT 120

ATAATGATTA AA 132

SEQ ID NO:4093

LENGTH:130

TYPE:nucleic acid

TOPOLOGY:linear

01307

2153480

CLONE:HUMGS04823

SEQUENCE DESCRIPTION:

GATCGGGGGT GGGATGGGAT GGAGTGAGCC CCATCCAGTT AGTTGGACTA GTTTAAATA 60  
AAGGTTTCC GGTTTGTTT GAACC ATACTGTTA GTAAAATAAA TACAATGAAT 120  
GTTGAGTAAA 130

SEQ ID NO:4094

LENGTH:128

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04824

SEQUENCE DESCRIPTION:

GATCACAGAG GGAGGAGCTC TGAGAACAGT CTCCTTCAAC AGCTCGGCCA AGCAGAACTG 60  
CTGTACCTCT GACCACCTGT GTTAGGAAAA CTATCGGCTC CCTGTATAAT AAATCAAGCC 120  
AGGTCAAA 128

SEQ ID NO:4095

LENGTH:126

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04826

SEQUENCE DESCRIPTION:

GATCTTGCC TNTAACGTTG AATATTGGC TTAAANTTG TNCAATATGAA TACTGTTAAA 60  
GGTATATTN ACTACATTTT GAAAGGAAAA AGGTAGTCCT GCTAAAATTG ACATTAGGG 120  
ATANN 126

SEQ ID NO:4096

LENGTH:124

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04827

SEQUENCE DESCRIPTION:

GATCTGAAAT TCTGAGATAT CAATCTAGGA ATTCAAAAG AAACAGATTA TAGAATTAA 60  
AACTAACAC CNGTCTGTA TTAAGAGAAG TCAACATTTT AAATAAAACC TTGTTCTTAC 120  
CAAA 124

SEQ ID NO:4097

LENGTH:123

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04828

SEQUENCE DESCRIPTION:

GATCTCAGAA CTGTGCCAAG CAGACACTGG GACAAAGGGA GAATATCTTG CTCCCCCTCCT 60  
GAGTCAGCCT GGTGTTGCC TTTATTCCCC TTATGTGCAT ATGATTAAG AGTTATTTT 120  
AAA 123

01308

2153480

SEQ ID NO:4098

LENGTH:122

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04829

SEQUENCE DESCRIPTION:

GATCCTACAA ACAGACATT TCCACTCGTG TTTCCATAGT TGTTAAGTGT ATCAGATGTG 60

TTGGGCATGT GAATCTCAA GTGCCGTNT AATAAATAAA GTATCTTAT TTCATTCTATA 120

AA

122

SEQ ID NO:4099

LENGTH:121

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04830

SEQUENCE DESCRIPTION:

GATCTTCTCG CCTCAGCCTC CTGAGTAGCT GGAGCTACAG GTGTGAGCTA CCCAGCATGG 60

CTCATTGAG ATTTCTGAGT AGAGAAGTAA CATGATTAAA CTTGGGTATT GAGATTATAA 120

A

121

SEQ ID NO:4100

LENGTH:121

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04831

SEQUENCE DESCRIPTION:

GATCAATCTC TCCCCTCAGCT TTCTTCCTA CTTTGCAGC TTTGCTGGCT TTAACTGCT 60

TCATTCTCT GCTTCATTGG TATCCTTTT TCTTTGAAA TAAAAACATG AAATACTTAA 120

A

121

SEQ ID NO:4101

LENGTH:121

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04832

SEQUENCE DESCRIPTION:

GATCGACTGA GTCCAGAAAG TCAAGGCTGC AGAGAGCCAC ATTCACTGCA CTCCAGCATN 60

GNTGNCAAGAG GNAGACCCCTG TCTCAAAAAA AAAAGAAAAA AGAAAAAGTG ACAATGNCAA 120

A

121

SEQ ID NO:4102

LENGTH:119

TYPE:nucleic acid

TOPOLOGY:linear

01309

2153480

CLONE:HUMGS04833

SEQUENCE DESCRIPTION:

GATCGGTAGG GGGCCTGCTC CTCGGACTCT GGTTACCTCT AAGGCTGGGA AAGGCCTGGT 60  
TGCCCCACTGC NTCCNTCCCT GCCCCTCCTT TNATGTCCAT AAAGTGGCGT GAAGTGAAA 119

SEQ ID NO:4103

LENGTH:116

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04834

SEQUENCE DESCRIPTION:

GATCACCCCTT AAATCNGNGT TGGGAAAATA TCAATTAACG GGAACCTCTG GTTTGAATTG 60  
TCAATATGTA TCTTAATATG AAATAGCTCA TTAAAACCTTC ATGTGTAACG ATTAAA 116

SEQ ID NO:4104

LENGTH:115

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04835

SEQUENCE DESCRIPTION:

GATCTGGGTG GTAGTTACTG GGTGTGTTCT CTTTGTGATA CTCTCTCGAG ATGTACACTT 60  
AGGATTGCA ATCTTTCTG TAAAATATTT CAATAAAAGA CATTATTTT TTAAA 115

SEQ ID NO:4105

LENGTH:115

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04836

SEQUENCE DESCRIPTION:

GATCTTAGCT AAATCTCGGT AGATGTCATT ACAACCTNGA AAATAAATCA CCCTAAGTGA 60  
CACAAATTGA AGCATGTACA ATTATACAT ATAAGTGT TTTAATAAT TGAAA 115

SEQ ID NO:4106

LENGTH:115

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04837

SEQUENCE DESCRIPTION:

GATCCTNCAC CTCTTGGNAA TTAAATTGT TGGTCACTGG GGAAAGCCTG AGTTGCAAC 60  
CAGTTGTAGG GTTTCTGTTG TGTTTTTTA AAAAAAANTN NAATN 115

SEQ ID NO:4107

LENGTH:115

TYPE:nucleic acid

TOPOLOGY:linear

01310

2153480

CLONE:HUMGS04838

SEQUENCE DESCRIPTION:

GATCAGACAA GGAATGAAGC AATGNCTGTG GGCTGGAAA CTGTACCTAC CTCTCTNCCC 60  
ACTGCAAATN NCTGGGATAG ACCAAAAGTG AATTAAATTA TGTNTTGCT GAAGN 115

SEQ ID NO:4108

LENGTH:115

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04839

SEQUENCE DESCRIPTION:

GATCCCAACT TGAAACAACA GCCAGTGCCT GTGGTAACCT AANNTNTGT CAAATACTTT 60  
TATTGATTGG TTATATGCC ATTNTTGTAA TAGAAGAATA TGCCTTTAA AAANN 115

SEQ ID NO:4109

LENGTH:112

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04840

SEQUENCE DESCRIPTION:

GATCAGCTCC GTGGGACTGA TATTGGTCCA CANCANAACA GGCAGTGCCT CCTTCCTCT 60  
GGGAATGCA AAAGAAANCA TGGATTAAGN GAGAAGGGAG ACTCTCAGCN TN 112

SEQ ID NO:4110

LENGTH:111

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04841

SEQUENCE DESCRIPTION:

GATCGCCCAA TAAACATTCC CTTGGATGTA GTCTGAGGCC CCTTAACCTCA TCTGTTATCC 60  
TGCTAGCTGT AGAAATGTAT CCTGATAAAC ATAAACACT GTAATCTAA A 111

SEQ ID NO:4111

LENGTH:111

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04842

SEQUENCE DESCRIPTION:

GATCGGCATA TGCATATCAA AAACAGCTCC CAGCTCTGTA AGGCATTAGA GTGAAAGCAN 60  
ANAATTTTT AATGAAACAT TTATTTGCCT TCTTTACTG CAGTGCTNNN N 111

SEQ ID NO:4112

LENGTH:111

TYPE:nucleic acid

TOPOLOGY:linear

01311

2153480

CLONE:HUMGS04843

SEQUENCE DESCRIPTION:

GATCATACTN CTTTATCTAG AGNTTTGTCT CAGCTTGAG AGNTTGAGGA GAAGATAGAC 60  
CAGTTACATC AAGAACAAAGC TTTCCCTGAC TTTAATATGT TTNCNGAACT N 111

SEQ ID NO:4113

LENGTH:110

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04844

SEQUENCE DESCRIPTION:

GATCACAGTG CAGATAATTAC CCTCACACCT GTTAGGATGG CTTTCACCAA AAAGACAAAA 60  
GATACGTGTA GGCAAGGGATG TGGAGGAAAG AGAACTCTTG TATACTAAA 110

SEQ ID NO:4114

LENGTH:110

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04845

SEQUENCE DESCRIPTION:

GATCTTAGTC CGTTTTTTTT TTATATATTG TAACGTAAA TGAAAAAAGA ACCCCCCCTNN 60  
TGTATTATAG TCATGCGGTC TTATGTATGA TAAACAGTTG AATAATTAAA 110

SEQ ID NO:4115

LENGTH:110

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04846

SEQUENCE DESCRIPTION:

GATCTGGGAC TTCCAGAAAA CAGAACTNTN AAAANACAAG TTTCTTTGT TTAAACCACC 60  
CAATCTNAAG TATTTTTNA TGGCAGTCCT GGGCAGACTA ATACAATATN 110

SEQ ID NO:4116

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04847

SEQUENCE DESCRIPTION:

GATCTATCAT AAAAAGCAAT GTCTTCTCTG GAATGGGCT TCAGTTCCA CATTACAAT 60  
TAGTACATAT TACAATTAGT GATATGAATA AAGGCTGTTA TCCTACAAA 109

SEQ ID NO:4117

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

01312

2153480

CLONE:HUMGS04848

SEQUENCE DESCRIPTION:

GATCAAACAA GGTGACAGTG AAGTGGTTTC GGCCCTGCCA ATCTGATATC GTGTATGTAT 60  
GAGAGTGGTC AGCATTTCAC CACTGGTAAC AAGTTCCCTN CTGTNCAAA 109

SEQ ID NO:4118

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04850

SEQUENCE DESCRIPTION:

GATCTATATA ATTTATGTAT CACCTTCATT GTAAATTTAG CAGGAATGC ATCACAATTA 60  
TNATTTTTT TTTTGNAAC AGTGAACAA TAAAGATGCT ATTACAAA 109

SEQ ID NO:4119

LENGTH:107

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04851

SEQUENCE DESCRIPTION:

GATCATGTG CTGGCTTTA TAAACTCTAA GCGAAGGAGG AGCACTGCCT CAGCCTTG 60  
ACATGGTAAT GAAGCACTGT TTTAAATAA AAGAGAGAAA CACCAAA 107

SEQ ID NO:4120

LENGTH:118

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04852

SEQUENCE DESCRIPTION:

GATCCGTGAG GGCCTGANTT GGACTGGACC CACTGCTGAT TCCCTGCACC TAGCACAGTG 60  
CTTGCACAA AGTGGCTCT CAATAATAT TATTTGTCCA AGGAAGGAAT GAATGAAA 118

SEQ ID NO:4121

LENGTH:108

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04853

SEQUENCE DESCRIPTION:

GATCGTCTGA GCCCCNCGGG CACTGGGTGG GGCAGAGCAC GAGTTATTAA AAACAGTTAC 60  
ACTGCAGGGT TTCGCCAAC AAAGGTGGAC TGACATTCCC TCTTCAAA 108

SEQ ID NO:4122

LENGTH:107

TYPE:nucleic acid

TOPOLOGY:linear

01313

2153480

CLONE:HUMGS04854

SEQUENCE DESCRIPTION:

GATCTTTAT ACTCAGNTTAAACACTTTA CTTGGGTTTA CCAAGCCTCA ACTGGCATA 60  
CATAACANG CCACANGGAC CGTCCGTCA GGCCCAACCC ACAGGGN 107

SEQ ID NO:4123

LENGTH:107

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04855

SEQUENCE DESCRIPTION:

GATCCGGAAC CCACTTTTT ATTCACTCCC CATCGTCGTT TGGCCNTCC ATCNNCTTT 60  
NTCTTCCCT CTGCCATCCG TGACACTGAT AGTTNGTCAT ATAAATN 107

SEQ ID NO:4124

LENGTH:106

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04856

SEQUENCE DESCRIPTION:

GATCTCCAAT CTCCTCGGTT GCAACACCTG AATAAAGCCT TCTTCCCTCA CAATACTTG 60  
NNNCTCAGTG ATTGGCTTAC TGTGCAGTGA GCAACCTAGA CCAANN 106

SEQ ID NO:4125

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04859

SEQUENCE DESCRIPTION:

GATCAAAATC ACGTTTGTAG TATCATATCA AAAATTCTAA CCTGTTACA TTGTTTNAT 60  
GTTCATGTTC CTATGTATT AAAATATTAT TTTGTACTTA AA 102

SEQ ID NO:4126

LENGTH:101

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04860

SEQUENCE DESCRIPTION:

GATCTACGGC AATGTGAATC ATTCAAGATGT TTACAATAAA AAACACCACA TGAGTAAATG 60  
AATTCACTAA TGTTAATGTT AAACCTTCATG GAAAGNNNN N 101

SEQ ID NO:4127

LENGTH:100

TYPE:nucleic acid

TOPOLOGY:linear

01314

2153480

CLONE:HUMGS04861

SEQUENCE DESCRIPTION:

GATCCCCCT CAGGACAAAT CTACTCCAGC CACGATGAGA AGTGGGTGAG CCAGGGTCTG 60  
AGTTTCACAT TTGAACCAAA TAAAATGCTG TCAAGAGAAA 100

SEQ ID NO:4128

LENGTH:97

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04862

SEQUENCE DESCRIPTION:

GATCATGCCA TTGCACTGCA CCTGGGCAAC AAGAGTGAAA CTCCGTCTTA AAAAATATAA 60  
GAAATAAAA AATAAAAACC TGTCCCCAGA CTGGAAA 97

SEQ ID NO:4129

LENGTH:97

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04863

SEQUENCE DESCRIPTION:

GATCCTGAGC TAGGAGAGTA CATTTCAG ACCTTTGGTT TCCATATTAA GAAATTCAAGA 60  
TTTTNATGTA CAATAAAGAA GTTCTGGAAT TCTCAAA 97

SEQ ID NO:4130

LENGTH:96

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04864

SEQUENCE DESCRIPTION:

GATCTCTNTN CAGCCCTAAA GCTCCTTGGT TCTGTAATT CACCAATAGC CCATTCAAA 60  
AATAATTCTA CAGTAATCAG TGGGACTCCT GTTTTN 96

SEQ ID NO:4131

LENGTH:95

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04865

SEQUENCE DESCRIPTION:

GATCACACCA CTGCACTCAA GCCTTGGCAT CAGAGTGAGA CTCTGTCTCA GTAAAAAAAAA 60  
AATAAAATAAA TAAAAATGTT TAATTAACCA TGAAA 95

SEQ ID NO:4132

LENGTH:95

TYPE:nucleic acid

TOPOLOGY:linear

01315

2153480

CLONE:HUMGS04866

SEQUENCE DESCRIPTION:

GATCGTAGGG CATCAGAAAA ACAAAAAGAA ATAGAGAGAG TAAAAGAGAA GCAACAGAAA	60
GAACTCAATA AACAAAAACA GATTGAAAAG GTAAA	95

SEQ ID NO:4133

LENGTH:98

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04867

SEQUENCE DESCRIPTION:

GATCTTTATT GTTCCTCACC CCATTTCCCT CCTTGTGTAT GTACTTCCCC CACCCCCCTT	60
TTTTTAAGTA AAATGAAAT TCAATCTGCT CTAAGAAA	98

SEQ ID NO:4134

LENGTH:94

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04868

SEQUENCE DESCRIPTION:

GATCTAATAA GTATTGGAAT GCTTCCTATT TGCTGATAGA AGTACCAAAT AGTATTATTG	60
AAAGTCTAAC AAGACTTTT GTTGAGAAC ACAA	94

SEQ ID NO:4135

LENGTH:94

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04869

SEQUENCE DESCRIPTION:

GATCGAGGTA AGAGGGACTT TNTAAAGGC CTAGTCTATG GGATGGGGCG CGGGAGGGAA	60
TTTTTGAGA AATAAAATGA AGCTGCAGTG TAAA	94

SEQ ID NO:4136

LENGTH:92

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04870

SEQUENCE DESCRIPTION:

GATCACACCG CAGACATTAA GATTTTATA CCCAAGGCAC TTTAAAAAAA TGTTTATAA	60
ATAGAGAATA AATTGAATTC TTGTTCCATA AA	92

SEQ ID NO:4137

LENGTH:91

TYPE:nucleic acid

TOPOLOGY:linear

01316

2153480

CLONE:HUMGS04872

SEQUENCE DESCRIPTION:

GATCTTACT GATGCACTCA TGACAAAGTAC CCAATGTATT TTAGCTATT TAGTAGTATT 60  
TGTTCAATAA ATACGCAAGC TGTAAGGTAA A 91

SEQ ID NO:4138

LENGTH:91

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04873

SEQUENCE DESCRIPTION:

GATCTGCTT TCTGCATGTT TGTCTGTGTG TCTGCGTTGT GTGTGATTT CATGGAAAAA 60  
TAAAATGCAA ATGCACTCAT CACAAACTAA A 91

SEQ ID NO:4139

LENGTH:90

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04874

SEQUENCE DESCRIPTION:

GATCAAAAAA AATAAATCAC AATGGTATT AGAAAATATT TTTCACTGAA GGCTAACAAA 60  
ACACTACATA TAAAATTAT AAAATGCAA A 90

SEQ ID NO:4140

LENGTH:90

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04875

SEQUENCE DESCRIPTION:

GATCTTTGA TGTGCACTAA TGCCATTATT GGTAATGCCG GTTATTGGTG AATACAGCAT 60  
AGTTAAATAA ACTGTTACAG TAAATCTAAA 90

SEQ ID NO:4141

LENGTH:89

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04877

SEQUENCE DESCRIPTION:

GATCTAGGGC AAACTTGTCC AACTGTTGGC CCATGGAACA GCTTTGAATG CAGCCAACA 60  
CAAATCTATA AATTTCNTTA AACATTAAA 89

SEQ ID NO:4142

LENGTH:88

TYPE:nucleic acid

TOPOLOGY:linear

01317

2153480

CLONE:HUMGS04878

SEQUENCE DESCRIPTION:

GATCAGTCTC ATGGGCCATC TCTCCTCAG ATGTAATAA TATCTGGTTA AGTGTATAT 60  
GGAATAAAAGT GGACATTAA AACTAAA 88

SEQ ID NO:4143

LENGTH:88

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04879

SEQUENCE DESCRIPTION:

GATCTCAGTG ATGTTGAAC CTTCTGTGTA ACTTTTATT AAGTCTTGT ATCTCTCGAC 60  
TGATTAATAA AGAAGAGAAA CACGTAAA 88

SEQ ID NO:4144

LENGTH:87

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04881

SEQUENCE DESCRIPTION:

GATCTTTATT GGTGACCTT TGTAAGACAT TAGTTGAGG TACTACCTAT GTACTTGAAA 60  
ATAATAAAAGT GGCATTCTT TATGAAA 87

SEQ ID NO:4145

LENGTH:86

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04882

SEQUENCE DESCRIPTION:

GATCCACTT GTACTCCTAC CAGTAGGAAC GGTCTCTAA CAGAGAAGAT TATAGCAAA 60  
AATAAAATCT CTTCTTAATT CCCAAA 86

SEQ ID NO:4146

LENGTH:86

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04883

SEQUENCE DESCRIPTION:

GATCCAAAGT CCAGCTCTCT CACTGAAGCC TTATCTTCG GAAAGCTTCC AACAGTAAC 60  
CAGGAATTNA GCTTACTTGC TTTAAA 86

SEQ ID NO:4147

LENGTH:85

TYPE:nucleic acid

TOPOLOGY:linear

01318

2153480

CLONE:HUMGS04884

SEQUENCE DESCRIPTION:

GATCTAAAGA AGAAGGTTCA GTTTCAAAC AGAATTAGA GAAAATATAA AGAAATAATT 60  
TCTTGTCTCA AAAGGCCAAA GTAAA 85

SEQ ID NO:4148

LENGTH:84

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04885

SEQUENCE DESCRIPTION:

GATCCAGCTG TGCCTAAAGC CTGCCCTACC TCCGGACTTT AAAGTTTGT GAGCCAATAA 60  
AGTCCCTTTC TTGTTAAAGA TAAA 84

SEQ ID NO:4149

LENGTH:84

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04886

SEQUENCE DESCRIPTION:

GATCTGAAAA GGCATTAATT TATGTACTAA TTCTATAAAC ATGTATTAAT AATTGCAGTA 60  
TTATTAATA CAGATGGACT CAAA 84

SEQ ID NO:4150

LENGTH:83

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04887

SEQUENCE DESCRIPTION:

GATCAGGCC CCCAACTCTC CAGAACAGGC TACAAACATG CAAATTAGAA TTCTTTAAT 60  
ATAAAAAAAA GTACTAAAAT AAA 83

SEQ ID NO:4151

LENGTH:83

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04888

SEQUENCE DESCRIPTION:

GATCAGAGGG NAGTACAGAA NCCTGAACt AAAGCNTTAA GTACATACCA TACAGCAAAT 60  
AAATGGTAGC AAAACATTCT AAA 83

SEQ ID NO:4152

LENGTH:83

TYPE:nucleic acid

TOPOLOGY:linear

01319

2153480

CLONE:HUMGS04889

SEQUENCE DESCRIPTION:

GATCTAAAAT TTGTAATATT TTTGTATGA ACTGTACTAC TCCTAATTAT TGTAATGTAA 60  
TAAAAATAGT TACAGTNACT AAA 83

SEQ ID NO:4153

LENGTH:81

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04890

SEQUENCE DESCRIPTION:

GATCACATGG TTCACTACCA AATNACCCTC AAATAAGCCA GATGAAAATT TGAAGAAAAA 60  
GGTCACCCAG TTCTCTGGAA A 81

SEQ ID NO:4154

LENGTH:81

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04891

SEQUENCE DESCRIPTION:

GATCAGAGCG TAGTTTAAN TGTATTTTG ATACACTTGT GAAATATTT ATAGAAATAA 60  
AAATTTTAC TTAGGAGCAA A 81

SEQ ID NO:4155

LENGTH:81

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04892

SEQUENCE DESCRIPTION:

GATCCTTCCT CCCACCTAN GCCTTCCTT CCTTTCCCT CCTCACTCTC CCCGTATGC 60  
TCCCTCTGCC CNGNCCTCAA A 81

SEQ ID NO:4156

LENGTH:80

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04893

SEQUENCE DESCRIPTION:

GATCCAAANT AGTAACNTTT TNTNATGAAC TGTACTACTC CTAATTATTG TAATGTAA 60  
AAAATAGTTA CAGTGACAAA 80

SEQ ID NO:4157

LENGTH:79

TYPE:nucleic acid

TOPOLOGY:linear

01320

2153480

CLONE:HUMGS04894

SEQUENCE DESCRIPTION:

GATCATTAGT CAATTGCTTT AATTATAAGC CCTGTTTTT TTTAAATCTA AAAACTAATA 60  
AACATCTATA AGAATTAAA 79

SEQ ID NO:4158

LENGTH:79

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04895

SEQUENCE DESCRIPTION:

GATCNACTGT CAAAAAGAAG GGTTCAAGTA AAATAAAATG AGAGCAATTA TATATATAAA 60  
TATATATCAT ACACAGAAA 79

SEQ ID NO:4159

LENGTH:76

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04897

SEQUENCE DESCRIPTION:

GATCACCTGA ATTCTGGAGG TTGAGGCTGC ACCACTACAT TCCAGCCTGG GAGATAGAGT 60  
GAGAGCCTGT CTTAAA 76

SEQ ID NO:4160

LENGTH:76

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04898

SEQUENCE DESCRIPTION:

GATCCCAAAT NTTCCCACAA GCTTTATTCC AAAATAATT TTATTTAATA GGTATTAAT 60  
AATGTATAGA AGGAAA 76

SEQ ID NO:4161

LENGTH:74

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04900

SEQUENCE DESCRIPTION:

GATCTTCCTG TTTCAGTCCC CAAGGTGTTG GGATTATGGG CATGAACUGC TGCAACCCAGC 60  
CCTTTATACT CAAA 74

SEQ ID NO:4162

LENGTH:73

TYPE:nucleic acid

TOPOLOGY:linear

01321

2153480

CLONE:HUMGS04902

SEQUENCE DESCRIPTION:

GATCACTGGT ATGTAGATAA TAAAATGTGA AAATAAAAAT TTAAAAATAA AACAAAAATT 60  
ATGTGATAAT AAA 73

SEQ ID NO:4163

LENGTH:73

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04903

SEQUENCE DESCRIPTION:

GATCGTGCAA CTGCACTCCG GCTTGGGCTA CAGAGTGAGA CTCCATCAGA AAGAAAAGAA 60  
GAGAGAGATG AAA 73

SEQ ID NO:4164

LENGTH:74

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04904

SEQUENCE DESCRIPTION:

GATCAGCATG TAAAGTGTCT GGC GTGTAGT AGGCTCTAA TAAACACTGG CTGAATATGA 60  
ATTGGAATGA TAAA 74

SEQ ID NO:4165

LENGTH:72

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04905

SEQUENCE DESCRIPTION:

GATCTCAACT CGTGGCACTA ACTTGGAAAA GGGTTGATT AAAATAAAAG GGAAGACTAT 60  
TTTACAAGCA AA 72

SEQ ID NO:4166

LENGTH:70

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04907

SEQUENCE DESCRIPTION:

GATCCTAAC AGATGCATTG TTGCTTTCT GTGCTGTCTC TGCA GATTA AACATAATGA 60  
TTACACTAAA 70

SEQ ID NO:4167

LENGTH:135

TYPE:nucleic acid

TOPOLOGY:linear

01322

2153480

CLONE:HUMGS04908

SEQUENCE DESCRIPTION:

GATCTATTAT GCCTTTTAC AAAAAAAATG GCTGTAAATN ATTGTAAATA TTAAAGGAAC 60  
TTTCCTTACT TCCTCCCTT TCTCAGGCTT TTTTGACTG TTCCCTTCCC TACCAACTCA 120  
GGCCTTCTTA TAAA 135

SEQ ID NO:4168

LENGTH:69

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04909

SEQUENCE DESCRIPTION:

GATCTCCCTG GAGGTTTCAT AGCAAGGTTT GACTTGATGA ATTAATTAAT AAAGCTAAAT 60  
ATCCTGAAA 69

SEQ ID NO:4169

LENGTH:67

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04910

SEQUENCE DESCRIPTION:

GATCACCCAC GGGGAGGGAGA AGGAGGGAGTG AGACCCAGCC GGGTCAATAA ACCTGGACGC 60  
TTGGAAA 67

SEQ ID NO:4170

LENGTH:65

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04912

SEQUENCE DESCRIPTION:

GATCTGCTTA TAAATAAACT TAACAAATAC ACTATGGAGA TTAAAAACAA AATACCACCC 60  
ACAAA 65

SEQ ID NO:4171

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04913

SEQUENCE DESCRIPTION:

GATCTGTTTC TCTAGAAAAA AAGTCCATCT CTGGCTTAA TAAAATTATG CATCAGAAAT 60  
CAAA 64

SEQ ID NO:4172

LENGTH:76

TYPE:nucleic acid

01323

2153480

TOPOLOGY: linear

CLONE:HUMGS04914

SEQUENCE DESCRIPTION:

GATCTCATGC TNAGCAGAGC AAAAATTGTA AAATATTTG ATTAaaaATC TAGGGACCTT 60  
TATGTCTTAT TTGAAA 76

SEQ ID NO:4173

LENGTH:63

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04915

SEQUENCE DESCRIPTION:

GATCAGGAAG TGGCTTTGTG TCTTCCCACA TGTATGTATA AATAAAAGTGT TCTTTAAGC 60  
AAA 63

SEQ ID NO:4174

LENGTH:63

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04916

SEQUENCE DESCRIPTION:

GATCCTCATT TTTTCCATT GTAAAATTGG GCTAATAAAA GATGCTACCT ACTGACTATT 60  
AAA 63

SEQ ID NO:4175

LENGTH:62

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04917

SEQUENCE DESCRIPTION:

GATCACGCTA CTGCACTCCA GCACCTCCAGC GCAGGCAACA GAGGGAGACT CTTTGTCTCA 60  
AA 62

SEQ ID NO:4176

LENGTH:62

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS04918

SEQUENCE DESCRIPTION:

GATCCTGAAT TTCCCAGCCA ACAGAACCAA GTGCTAAATA AAACTCTTT TAATAAGTTA 60  
AA 62

SEQ ID NO:4177

LENGTH:62

TYPE:nucleic acid

01324

2153480

TOPOLOGY:linear

CLONE:HUMGS04919

SEQUENCE DESCRIPTION:

GATCAAAACT CTGTTCTCAA AAATAAATAA AAAATAAAAA ACAAAACAAC AACAAACAACA 60  
AA 62

SEQ ID NO:4178

LENGTH:61

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04920

SEQUENCE DESCRIPTION:

GATCACGCCA CTGCATTCCA GCCTGGGAGA CAGAGTGAGA AATAAATAAC TGTAATGTAA 60  
A 61

SEQ ID NO:4179

LENGTH:60

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04921

SEQUENCE DESCRIPTION:

GATCCAAGCA AACTACTTTA AGCAAATATT TGTAAAATTA AAAACGGAGG ACCGCTCAA 60

SEQ ID NO:4180

LENGTH:60

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04922

SEQUENCE DESCRIPTION:

GATCTAACAG TTCTCCAATA AAATAGTTCT CATTCCAGAG AGCAGATGAA TATATTTAAA 60

SEQ ID NO:4181

LENGTH:59

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04923

SEQUENCE DESCRIPTION:

GATCTATGAC TGTACTACAC TCCAGCCTGG TCAACAAAGC AAGACCATAT CTCTTTAAA 59

SEQ ID NO:4182

LENGTH:59

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04924

SEQUENCE DESCRIPTION:

01325

2153480

GATCCAAGTA TTTNATCTGT GTTGCTCTC TAAACCCAAA TAAATGTGTA AATGTGAAA 59

SEQ ID NO:4183

LENGTH:59

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04925

SEQUENCE DESCRIPTION:

GATCCAATAC ACACATANCT TACAACATAC ACAAAATTCCCT ATTAAATATT AAAAGTAAA 59

SEQ ID NO:4184

LENGTH:59

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04926

SEQUENCE DESCRIPTION:

GATCTCAAAN NGAAATCTTA TACCACTGAC AACTGTATTA GAATATATCT GTTCTTAAA 59

SEQ ID NO:4185

LENGTH:57

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04927

SEQUENCE DESCRIPTION:

GATCTCATAT TAATATTTA ATATTCTTT TCAAAATAAA ACAGAAAAGC AAGTAAA 57

SEQ ID NO:4186

LENGTH:57

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04928

SEQUENCE DESCRIPTION:

GATCTGTGTG TTCTTCAAA GAGAAGTTAT GTCTAATTAA AATGTGTAAC GGACAAA 57

SEQ ID NO:4187

LENGTH:57

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04929

SEQUENCE DESCRIPTION:

GATCCGNGAG AGAACGACCA CAATTAAAC ACATCAATAA ATACTTTAAC TTCCAAA 57

SEQ ID NO:4188

LENGTH:56

TYPE:nucleic acid

01326

TOPOLOGY: linear

CLONE: HUMGS04930

SEQUENCE DESCRIPTION:

GATCAAGAAG GACTACCTGT CATGTGAGAC CATCACTAAG AAACCATTG CTGAAA

56

SEQ ID NO: 4189

LENGTH: 52

TYPE:nucleic acid

TOPOLOGY: linear

CLONE: HUMGS04940

SEQUENCE DESCRIPTION:

GATCCCACTT CGGTCTGTAA ATTCCCTCAA TAAATCACCC AATATTGACA AA

52

SEQ ID NO: 4190

LENGTH: 51

TYPE:nucleic acid

TOPOLOGY: linear

CLONE: HUMGS04945

SEQUENCE DESCRIPTION:

GATCCCCAAA GCTTAAAATA TCGACTATT AGAGTGAGAC TCCATCACAA A

51

SEQ ID NO: 4191

LENGTH: 51

TYPE:nucleic acid

TOPOLOGY: linear

CLONE: HUMGS04947

SEQUENCE DESCRIPTION:

GATCAGCCAN GCATTCCAGC CTGGTGACAG AGCGAGACTC TGTCTCNGAA A

51

SEQ ID NO: 4192

LENGTH: 56

TYPE:nucleic acid

TOPOLOGY: linear

CLONE: HUMGS04948

SEQUENCE DESCRIPTION:

GATCTTGTTC GTTGAGGGAG ATGGGACTAT AATAAAATTG AATGCTGAAG TTGAAA

56

SEQ ID NO: 4193

LENGTH: 50

TYPE:nucleic acid

TOPOLOGY: linear

CLONE: HUMGS04950

SEQUENCE DESCRIPTION:

GATCGCGCCA CTGCGTTACA GCCTGGCGAT AATGCAGGAC TCAGTCCAAA

50

2153480

SEQ ID NO:4194

LENGTH:113

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04965

SEQUENCE DESCRIPTION:

GATCTGTCTT GTAAACCACA TTCTTGACAA CTATTTGCTT TTGAGTAGTT TGTATTTAA 60  
TATGTGACTT TNGTCTTGAA AAGTAGTAAA GCCATAGACT TGTGCAAAAC AAA 113

SEQ ID NO:4195

LENGTH:192

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04985

SEQUENCE DESCRIPTION:

GATCATTATG CAATAAAGCT GCTAAAGTNA CATTGTTGGT TGATACTCAA GCCTTGTACA 60  
AGCACATATN ATGTAGACAT TTTNAAATGT NAAGCTTTAA CAGGAATAGG ATAGCTGTTT 120  
CAAACCTTGT GCAATTGTAATAAATTGTT TAGCTGTGTT TCTTCATTT TNAATAAAAAA 180  
ATTAAAAAGA AA 192

SEQ ID NO:4196

LENGTH:50

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04986

SEQUENCE DESCRIPTION:

GATCAATTG TAATTGCTTA CATTTTACA ATAAATAATC TGTACGTAAA 50

SEQ ID NO:4197

LENGTH:282

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04987

SEQUENCE DESCRIPTION:

GATCTTCCTT TGGCAACCAC TTTTACTGT CGCCATAGTT CTTCCCTTTC TAGAATGTCA 60  
TATTGGAATC ATATAGTATG TAGCCTTTTC AGACTGGCTT CTTTCACCTTA ATAATATGCA 120  
ATTAAGGTTC CTCCATGTCA TTTCATGGCT TAATAGTGCATA 180  
ATACTCCATT GTCTAGATGA ATAGTTTATC CATTCACCTA TTGAAAGACT TCTTGGTGGT 240  
TTCCAAGTTT TGGCAATTAT GAATAAAGCT GTTGAAACAA AA 282

SEQ ID NO:4198

LENGTH:257

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04988

01328

2153480

SEQUENCE DESCRIPTION:

GATCTTTCA GTCAAAAATC TAAGATGATT TATTTGTAT CACTTGTAA AAAGCTGAAT 60  
ATTGTTAACT ACAGTTAATA TTAACACTGT ATTATACTT TCTCAAACCA CATCCGCC 120  
ACCACTTCTG GTTGCCCTCTG TTGACTATTA ATCCAGATGT AAACAACCAAG ATGTTTTTT 180  
CTAACTGTAA CAAACTGACG TGTGTCAACT ATCATGGAAG GAAAAAAATG TACAGATTAA 240  
AATTATTCAAG NGTTAAA 257

SEQ ID NO:4199

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04989

SEQUENCE DESCRIPTION:

GATCCAGGNG TTGACTATAA CCAGATTTAC TCTTTGTAA CTAGGNTTC CATNNTCACC 60  
ATTGGATGAA CCNCTGGTTT AGCCACAGTT GTGAAAATAA ATGGAAGTTG GTTGATTGTC 120  
TAGAAAAGTGA AA 132

SEQ ID NO:4200

LENGTH:51

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04990

SEQUENCE DESCRIPTION:

GATCCGCATC CAAGCTTAAC CAAGGCTCCA ATAAACGTGC TAGGAAGCAA A 51

SEQ ID NO:4201

LENGTH:108

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04991

SEQUENCE DESCRIPTION:

GATCAGTCGC TGACTCATTA GATGAACCAAG GAGCCTGCAT GCTACAGCCC ACCTGCCAA 60  
TCTTGCCTCCC ACCTGCTTT TAAAATAAAG TTTTATTGGA ACATGAAA 108

SEQ ID NO:4202

LENGTH:113

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04992

SEQUENCE DESCRIPTION:

GATCTTGCT CTGTTTCCAG TGGGGTTTGA AGCAGAGTTC AGGGAACCT GCCCAAGGTC 60  
CTCCTGTTCA GACATTCTA TGTTGAATAA AGTATGTTG ACTTCCCCGG AAA 113

SEQ ID NO:4203

LENGTH:471

01329

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04993

SEQUENCE DESCRIPTION:

GATCCCACCT CAAATTAGCT TGATTGCAAA ACAGATATTG GAACATGGAG CTGAGAAGAA 60  
GATGGTCTGG GCTTCAGGCA CAGCTGGTC CAGGGACTCA GACCNNNTG TCTCCATCTA 120  
TCTNCTGTGT TTTNCTGTAG GAGGTGGCCT CACTTCCCC TAGTTCAAAA GGGCTTACTC 180  
CATATGATGG GGGAAAGGGAA GACAGGNCCA TGAACAGGCC TAGACTTCCA TCAGCCCACC 240  
TGGGAAGGCC TCACAGGAAA ATNAGTCTCA TTCCTAGTAC ATGAAATCTC AGGGGAGGG 300  
ACTCCGATT GGCCACCTTC AGTNATGTGC CCNGTCCCTN GGGGCCAAT CCNCTTTGG 360  
GTTGGTGGGG GCGGGTTCA AGTGATTGGG NAAATNGCCA ACCNAAAGTT CANGTTNGAA 420  
GTTGGAGNAA NGGGGAANTT TTNCCCAAAA AGAAANGNA AGGTTTGNTA N 471

SEQ ID NO:4204

LENGTH:338

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04994

SEQUENCE DESCRIPTION:

GATCAGGAAT GGGTGATTGG AGATTATTAG ATTCTAGGTT AACTTCTACC ACTTTACCT 60  
AATAACATAAA ACTTTTCCT AAATAATGA TGGAAAGGAAT AATACTTGGT TACCTGGCAT 120  
TATTTTCAG TAAGAAAAAA GCTTTACTAA CCACTACATT TATGGAAATT TGTAGGGGTA 180  
AGTATTTTAT AGGTCTATAAA AAACACCATA ATATAACGAA TCTCATTNC TTTAAATGTG 240  
AATTAAATCC TAACAGTCAT CTTTATAAAA TGACCATAGG CTAACANTCTT ACGTGTAAGT 300  
NCTACTACAN TAAATANTT CTGGAAACCT TTTATAAA 338

SEQ ID NO:4205

LENGTH:237

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04997

SEQUENCE DESCRIPTION:

GATCACCTTC CAGACCACAG CAGATGTGGG ACACACAGCC TCCTGACTCC AGGAAGAGCC 60  
AGANCTGTGC AGGGAGGAAG GGGTAGAGG GGGGCCCCCA CACCTAGACT CAGTAAGGAA 120  
GTCGGGTTNG ACCTAACAT CTNCATTGGA CAACTCCACC CNTNCCTTGG CCTTGGCCCT 180  
GCCCGNNTAC ACTCCTACGT NTCCANGGGC TTNGGCCGTG ACTTAGGNAG AGGAGTN 237

SEQ ID NO:4206

LENGTH:313

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04998

SEQUENCE DESCRIPTION:

GATCATCCGC AGNCTCATGT TAAAAGGATT TTAGCTCACT AAAAGTGTAA TAATGAAAT 60  
GTGGAAAATA TCGTAGGTAA AAGAAAATAC CTCATGCTCT GAAGGTTTG TAGAACACA 120

01330

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ATTAACATC TAAAATGGCT TTGTTACACC AGAGCCATCT GGTGTGANGA ACTCTATATT 180  
TGTATGTTGA GAGGGCATGG ANTAATTGTA TTTNGCTGGC AGTAGACACA TTCTTTATTA 240  
TTTGCAGATT CCTCATCAA TCTGTANTTA TGCACAGTT CTGTTATCAT TAAAACAAAG 300  
GAATCCNGTT AAA 313

SEQ ID NO:4207

LENGTH:271

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04999

SEQUENCE DESCRIPTION:

GATCACATCT NTNTGAAGCC AAAGCCCCGT GGTTGCCAT GAGAAGTGTC CTTTTCATT 60  
TTCACCCAAA TGAAGTGTGA ACGTGATGTT TTCGGATGCA AACTCAGCTC AGGNATTAT 120  
TTTGTNTCTT AGTTTATAT GCATCCTTAT TTNTAATACA CCTGCTTCAC GTCCCTATGT 180  
TNNGAAGTCC ATATTTGTNT GCTTTNTTG CAGCATCATT GCCTNTACAA TACTGNCCGG 240  
TGGACAAANT GACAATNGAT ATGTNTTGCT N 271

SEQ ID NO:4208

LENGTH:345

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05001

SEQUENCE DESCRIPTION:

GATCGCACTG TGGGCCGGGG CCCTGGAGGG CTGCTCTGTG TTAATAAGAT TGTAAGGTTT 60  
GCCCTCCTCA CCTGTTGCCG GCATGCGGGT AGTATTAGCC ACCCCCCTCC ATCTGTTCCC 120  
AGCACCGGAG AAGGGGGTGC TCAGGGGAG GTGTGGGTA TGCACCTGAG CTCCCTGCTTC 180  
GCGCCTGCTG CTCTGCCCA ACGGGACCGC TGCCCGGCTG CCCAGAGGCT GGATGCCCTGC 240  
CGGTCCCCGA GCAAGCCTGG GAACTCAGGA AAATTACAG GACTTGGGAG ATTCTAAATC 300  
TTAAGTGCAA TTATTTAA TAAAAGGGT ATTGGAATC AGAAA 345

SEQ ID NO:4209

LENGTH:406

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05002

SEQUENCE DESCRIPTION:

GATCTTACTT TCATAATTCT TTGATTCTAG CTTGCAGAGT CAAGACGNAA AGNTAACTCA 60  
TGGGATGGAC AACTGGAAG ATGTAATAAGT AGTAAGGCTT TNTGGGCCAA AAAGCCTCTT 120  
CTTACAGAAA ATCAAATTTT AAAAGAACAT TGACCTCAA ACAATAAAAC TGTCTGGTT 180  
ATGCAATAGA AATAGCTATA TAAATGGAAT CATATCCTTA ATGAACACCT CCTGTGGCTA 240  
CCCAACTTTT CACACATCTT ACTGATTATA GGCTTGCTG TGAATGCTTT CTTGCTCTAT 300  
CTGAAGTATT CCCACCAAGAG TTGTTCCAA CNTTATTTC TATATTATGA AAAATGANGT 360  
TTTTTAACA TTGTAACAAA GTATTGNAA GGTAAATGTAT ACTGTN 406

SEQ ID NO:4210

01331

LENGTH:74

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05003

SEQUENCE DESCRIPTION:

GATCTAAAAA AANNTAAATT ACATTAGTAA CACAACATAA GAAAAGACA GGGACAAAAA	60
CAAAAAAAA TAAA	74

SEQ ID NO:4211

LENGTH:230

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05004

SEQUENCE DESCRIPTION:

GATCCTATGT GGAAGGGCTG TTTTTAAGA AAAAATTTT GGTAAACAGT ATTGTGTAAGA	60
ATTGCTTTT GTATACCAAT ATATGCATGT TTTGTGCATG AGTAGTACTT GTGTTGATAC	120
TCCTGTTGAT GTTAAATTAC TATATAATAT AANCAGTATG TGTTTTATA TATCATTGTG	180
TAAATTTAAT ATAACATATG CNGTAATAAN CCATTNGTNT TACGGGCAAA	230

SEQ ID NO:4212

LENGTH:161

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05005

SEQUENCE DESCRIPTION:

GATCTCAATC AAGTTAGCAT GCTTNCTCCA GCTGCCCTAT NACCTGCCAG CTCATCACAA	60
AGAACCCACGG CCACCCAGGT CATGGCAAAC TCTGCTGGAC TTAACTTCAT CAATGTAGTG	120
GGCTCTNTTT GTGGGGCCCA GGCTTGATG AGTNGGNNNN N	161

SEQ ID NO:4213

LENGTH:259

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05006

SEQUENCE DESCRIPTION:

GATCGAGACC ATCCTGCCA ACATGGTGAA ACCCGTCTC TACTAAAGAT ACAAAATTA	60
GCTGGACATG GTGGCGGGCG CCTGTNTTCC CAGCTACTGG GGAGGCTGAG GCAGGAGAAT	120
GGCTTNGAGG CAGTAGAACT GCTTGAACCC TGGAGGCGGA GGTTACAGTT ATCCGAGGTT	180
GTGTCAATTGC ACTCCAGCCT GGGGAACAGA GCGAGACTCC ATCTAAAAAA AAATAAAAAA	240
CTTCAGCTTT TGCATGAAA	259

SEQ ID NO:4214

LENGTH:71

TYPE:nucleic acid

TOPOLOGY:linear

2153480

CLONE:HUMGS05007

SEQUENCE DESCRIPTION:

GATCATGCTT TAAGGTTTAT GTAAAGAAAAG TGTACTGATG TTCTTACATT AAAGCTTTAC 60  
AAAGATTTAA A 71

SEQ ID NO:4215

LENGTH:67

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05008

SEQUENCE DESCRIPTION:

GATCTGGTG GTAGTAGCTG TCTATGATT C TNGCTCAGCA AAGTAAAATA AATGTAAAT 60  
ATGGAAA 67

SEQ ID NO:4216

LENGTH:143

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05009

SEQUENCE DESCRIPTION:

GATCAAATGA AATAATGTAC ATGAAAAGAC ATATATAAAA TGTATAATAC AGACAAAGGG 60  
NCCTGTTACA CAGTTGAAG TCATNCCTC AGATTTGGG CCTAGGAAGG TAGGTGATTT 120  
AAACTCACTG AAAGCANNGN NNN 143

SEQ ID NO:4217

LENGTH:362

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05010

SEQUENCE DESCRIPTION:

GATCACAGCC ACTGGTCCAT AACAAATTAGG AAAACTCATT GGACAATGGT TGTCAAGGTT 60  
CTCCATTGGA GGGATTGTG TTTCATGATT AGGCACTGTT TCTGCTCCCTT AAAAATGACT 120  
TTCCAGTCTA TCCTCCACAG CTCTTGTTC TACACTCTAG GGAATCATTC TTTTCCCTC 180  
ATCTTCCTTA GTCACTTGCA AAGGACATTA GAGAATATGC CCTTTTGTT GGATAAATGG 240  
GTTCTTCAAC CTGCTTTCTG CCTGTAGAAA ATTAGAGGCC AATAATCTGT TTATATCTTG 300  
TAGAATGTCT ATTTAGCTG GTACCGGTAC TTTGTCAAT AAAGTTCTT TTTAAACTTA 360  
AA 362

SEQ ID NO:4218

LENGTH:213

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05011

SEQUENCE DESCRIPTION:

GATCTGNGAA GAGCACATAT GTGTCAGGGC ACAATTCCCN CTCATAAAAA CCACACAGCC 60

01333

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TGGAAATTGG CCCTGGCCCT TCAAGATAGC CTTCTTTAGA ATATNATTG GCTAGAAAGA 120  
TTCTTAAATA TGTGGANTAT GNTTATCCTT AGCTGGAATA TTNCTCTAC TTCCGTCTG 180  
CATGCCCNAG GCTTCTGAAG CAGCCAATGT CGN 213

SEQ ID NO:4219

LENGTH:169

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05013

SEQUENCE DESCRIPTION:

GATCACTACA ACANTNTT TGCTCTCAAG GTCCTCTGAG GCAGCAGGCT CTGGGGCTTC 60  
TNCTGTCCTT TGGAGGGTGT CTTCTGGTA GAGGGATGGG AAGNAAGGGA CCCTTACCCC 120  
CGGNTCTTCT CCTGACCTGC CAATAAAAAT TTATGGTCCA AGGGAGAAA 169

SEQ ID NO:4220

LENGTH:235

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05014

SEQUENCE DESCRIPTION:

GATCGCGCAG GATTCAAAA CCGACCTGAG GTTTCANAGC GCANCATCGG TGCGCTGCAG 60  
GAGGCTAGCG AAGNANCCTG GTGGGTCTGT TCGAAGATAC CAACCTGTGT GCCATCCACG 120  
CTAAGAGAGT CACCATCATG CCCAAAGACA TCCAGTTGGC TCGCCGGATA CGGGGAGAGA 180  
GAGCTTAAGT GAAGGCAGTT TTATGGCGT TTTGTAGTAA ATTCTGTAAA ATAAA 235

SEQ ID NO:4221

LENGTH:196

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05016

SEQUENCE DESCRIPTION:

GATCAAAGTC CTACAGTGGC TGTACCGCAG CCACNAGGTC ATCTCCTTC ATCCCCACCC 60  
CAAGGCGCTG GCTGTGACTC TGCTCCTGC ACTGACCCAG AGNCTCTGCC TGTGCATGGC 120  
CAGCTGCGTC TACTCAGGTC CCAAGGGTT TCTGTTCTA TTCTTCCTC AGACTGCTCA 180  
AGAGAAGCAC ATGAAA 196

SEQ ID NO:4222

LENGTH:262

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05018

SEQUENCE DESCRIPTION:

GATCTGCACC AGACTGTTAC CTTCTGGGG AGATGGAGAT TTGACTGTTT AAAAACTGAA 60  
AACAGCGAGG AGTCTTTCTA GAACCTTGA AACTAAAAG GATGAAAAAA ATTAGCAAAC 120  
CGAAGTTCT TCAATGACCC CTCGAGAACT TTGGGACCAG TTCCATGG GGGACTCAGT 180

01334

2153480

TTCAGAGAAC TGAGACAGAA GCTCTTCTGT CGTTATATTG TTCTTCCTT TTTTGGATT 240  
TATTAATAT TTTCTGTGGA AA 262

SEQ ID NO:4223

LENGTH:277

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05019

SEQUENCE DESCRIPTION:

GATCCTGCAG TGTCTGTGG GTTCATCTG GATGGGCGCT GCATAAACAG CCTGCAGGGA 60  
ACGTCTGGGA GAACCAGCTT CACAACAGAT ATAATAAGGA AGAAGTTGA AATATTGCAA 120  
GANTTGCAGA AGTGTGACAC ACAGATACAA AGTGGGCACA TGCTCGTGGG AAAATGTTGC 180  
CAATAGACTT GCTTGACTCT GGAGTTACCC CGAACCTTCA ATTTGTTAA AAAAAAAAAN 240  
GGGCANTTTN TTGNNGNGCA NTAAGGTGNC CTGCAA 277

SEQ ID NO:4224

LENGTH:271

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05021

SEQUENCE DESCRIPTION:

GATCGCGTCC ACCTTCATCG CTGTGGTGCA AGCCATCGTC CGCACGGCTG GTGGCTGGC. 60  
AGCTGCCTCG GACTCCAGGA AAGGCAGGGA GCCTGCCGGC TACTGAGTGC TCCAGGAGGA 120  
CAAGGCTGAC AAGCAATCCA GGGACAAGAT ACTCACCAGG ACCAGGAAGG GGACTCTGGG 180  
GGACCCGCTT CCCCTGTNAG CAGCAGAGCA GCACAATAAA TNAGGCCACT GTGCCAGGNT 240  
CCAGGTGGCC TNCCTGGNCT GTTCCCCAA A 271

SEQ ID NO:4225

LENGTH:138

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05023

SEQUENCE DESCRIPTION:

GATCCACGGA AGACTGTCAG CAGACTTCAC CAGAAAACCTT TCACGCCAGA NGGCAGTCGT 60  
GATATATACA AAANGCTGAA AGGAAANCAC TGCCATCCAG GANTACTATC TCCAACNTNC 120  
CTGTGTTCA AAANTTAN 138

SEQ ID NO:4226

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05024

SEQUENCE DESCRIPTION:

GATCTGCATT TAAAAATATG GTCTTTGTTT TATATGATTA AATGGTTGT TTTCATAGAT 60  
GAAA 64

01335

SEQ ID NO:4227

LENGTH:296

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05025

SEQUENCE DESCRIPTION:

GATCCCGGCT GTGGTGAGC AAAGAGCCCA GGCCCCTAGA GTGCCCATGT NCAGGCTCCG 60  
 CTGTTAGANT CACAGCGGTT CAAATCCGGC ATCTGGTCGC TGAGTGGCCT CAGGCAGTGA 120  
 CCACGCTCCC GGACCCAACC TTCAGCTTGC CCAAAGCAAT AATCTTCCCT AAAGAAGTGC 180  
 TTGGNTGGGG ATGGTGGCTC ACGCTTGTAA ATCCCAGTAC TTTGGGAGGC CAAGGCAGTC 240  
 TGGGCAATAT AGTGAGGCTC CCATCTGTAC TAAAAATAAA AAAGTTAGGC GTGAAA 296

SEQ ID NO:4228

LENGTH:135

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05026

SEQUENCE DESCRIPTION:

GATCAGACCT CTCATGCTGT GGAGATGAAA AAGCCCTAAA GTTTATGTTT CTAATGTGTC 60  
 ACAGAATAGG ACGATATGAT TCTACAACAT AATCAACTCC CTATTAATT CTTTAATGAA 120  
 GATTTTTTTT TTAAA 135

SEQ ID NO:4229

LENGTH:337

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05027

SEQUENCE DESCRIPTION:

GATCCTCTTT CTAGCATGAA TGAAGGATGC CAAGAACATGAG AAAAAGCAAG GGGTTGTCC 60  
 AGGTGGCCCG TGAATTCTGC GCAAGGNATG GGCCTGGGGG AACTCAAGGG AGGGCTAAA 120  
 GCACTTGTA CTTTGAACCG TCTGTCTGGA GGTCAAGAGCC TGTTGGAAAG CAGGGGTAGA 180  
 GGGGAGCCCT GGAAGCAGGG CTTTCCCGGA TGCCTAGGGG TGGGCAGTGC CAGCCCTCC 240  
 TCACCACTCT TCCCCTTGCA GTGGAGGAGA GAGCCAGAGT GGATACTATT TTTNATTAAA 300  
 TATATTATTA TATGTTAATA AAAAANTCAT ATCCAAA 337

SEQ ID NO:4230

LENGTH:179

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05028

SEQUENCE DESCRIPTION:

GATCCTTCGC GAGCGAGTGA ACAAGAGGCG GGTGAAGGAG ATGGTGAAGG AGTTCACACT 60  
 GCTGTGCCGG GGTCTCCATG GCACAGGGTA CACAGCTGAC TACTGAGGG TGCCCCATC 120  
 CCATCCACCC CTTCTCTTCA TCCTTCCCTA TTCCCAAAGN GTAAACCTGG NCCCTNAAA 179

2153480

SEQ ID NO:4231

LENGTH:207

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05029

SEQUENCE DESCRIPTION:

GATCGCTGGA CGCTATGAGA GGGCGTCCC A GGGCCCAGCC TCCCACAGCC GTTCAGCAG 60  
GGACAGGGGC TGAACAGGCC CTATTCCAGC CCCCTTGCTT CACTCTACCG GACAGACGGC 120  
AGCAGTCCC A GCTCTGGTT CCTTCTCGGT TTATTCTGTT AGAATGAAAT GGTTCCCATA 180  
AATAAGGGGC ATGAGCCCTT CCTCAAA 207

SEQ ID NO:4232

LENGTH:386

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05030

SEQUENCE DESCRIPTION:

GATCTGAAAT AGTTTCTTC CACTACATTG TTGAAATCAA TGAAGCAATT AGTTTCTCAT 60  
TCAGAAATGT GCACACTAAT ATTTAGTTT GCTTTCTCGT GGATAATATT AAGCNCTTAC 120  
TCTGCAGTT CCTGGAAGTT GTGTCAACTG CAGTGATACT ATTCAAGGATG GTGGGAAATC 180  
CCCCAAAATA TGTATGTGTG GGCTTGCTTA GATTACTATA TTTCATAGTT AATCTTTGT 240  
CTCTTGCGGT GCTCATGATG TGTGGGCAC ACAGGAAGGCA TTGCTGTAGT CAGTCATTT 300  
GGTTTCTTC TATAGCCATT TTATTATTT AGTGTATTAG TTATGAAGAT AATATTNNCT 360  
ATTTGTAAAT NGCTACTTTG TATTTN 386

SEQ ID NO:4233

LENGTH:356

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05031

SEQUENCE DESCRIPTION:

GATCTTCANA TTGCTGTGAT TAATGCATCC AGATTNTTT CCTAGTATT CCAGGTTAGA 60  
ACCTGTGGAT TGTTICANTT GCATATAGCT TGGTTCCAT AACATAGAGC ATTGGTTGAC 120  
TGTTTACAGA AGACTCACTC ACCAGGATAA ACATTGCNGT ATGTNACAGT AAAGCTATCT 180  
GGAGAGANCA CATAAATGAT TTTGGCATAAC CATTAGAGAA ACCATTTGTA AAACTCAAAT 240  
GNCCACATAA NGCTTATCAG GGGGTCTAGA TTGGTNTTGT NNTATACCAT ATGGGATGAN 300  
GNAAAANTAGA AATGTCAGTA GAACTCATTG AGGGTGCCT NGCCAGCTGC NGANAN 356

SEQ ID NO:4234

LENGTH:105

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05033

SEQUENCE DESCRIPTION:

01337

GATCTGCTT TTTNAAATGT TAAGGACATA TTTTNAAGTT ACTGCTGAGT GAAGAAAGAA 60  
 CATACTCCCC CCTCATTCCTC TGCGTAAGAA AGGAGCTTAA AGAAA 105

SEQ ID NO:4235

LENGTH:343

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05034

SEQUENCE DESCRIPTION:

GATCAGGGCC TTCCTGCCTC CCGCTGGCA GGTCTGGCCT TGCNCTCTTG GCAGGGCCCC 60  
 AGCCCCTCTA ACCACTCTGC AGCTCACCAT GCAGCTGATG CCAAANTTGT GGTGTCAGT 120  
 GTGCAGCAGC CCTGGGAGCC ACTGCCACCT TCAGAGGGGT TCCTTGCTGA GACCCACATT 180  
 GNTTCACCTG GCCCCACCAT GGCTGCTTGC CTGGCCCAAC CTAGCGTCT GTGCCATGNT 240  
 AGAGCTTGAG CTGTTGCTCT NCTTCAGGGG AGGAAATAGG GTNGAGAGNG GGAAGAGNN 300  
 TNGCTCCTAA GTGTTGCTGC TGTGGCTTT TTTGCCTCT GCN 343

SEQ ID NO:4236

LENGTH:370

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05035

SEQUENCE DESCRIPTION:

GATCATTCA AAACTCATTT CCTATGTAAC TGCATTGAGA ACTGCATATG ATTGCGTGAT 60  
 ATATGTGTT TTCACATTG CGAACGGTTC CATTCTCTCT CCTGTACTTT TTCCAGACAC 120  
 TTTTTGAGT GGATGATGTT TCGTGAAGTA TACTGTATT TNACCTTNTT CCTTCCTTAT 180  
 CACTGACACA AAAAGTAGAT TAAGAGATGG GTTGACAAG GTTCTTCCCT TTTACACACT 240  
 GCTGTCTATG TGGCTGTATC TNGTTNTCC ACTACTGNTA CCACANCTAT ATTATCATGC 300  
 AAATGCTGTA TTCTCTGTT GGGTGGAGAN AAAGGATTC TTGNAGGTTT NGTTTTAAA 360  
 ATTNAAGCN 370

SEQ ID NO:4237

LENGTH:529

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05037

SEQUENCE DESCRIPTION:

GATCTGTTGAGCAGCCCCACC CAAGCTTGGC AGNCAGCNN ATTGTATCCT 60  
 GGGGCTCCCT TCATCTCCAG GGAGTCCNN CCCCCGGCCCT ACCAGCGCCC GCTTGGCTGA 120  
 GCCCCTACCC CACACCAGGC CGTCCCTCCCG GGCCCTCCCT TGGAAACCTG CCCTGCCTGA 180  
 GGGCCCTCTC GCCCAGCTG GGCCAGCTG GGCTCTGCCA CCCTACCTGT TCAGTGTCCC 240  
 GGGCCCGTTG AGGATGAGGC CGCTAGAGGC CTNAGGATGA GCTGGAAGGA GTGAGAGGGG 300  
 AAAAAACCCA CCTTGTGGA GCCTGCAGGG TGGTGCCTGGG ACTTAGGCCA GTCCCAGGGG 360  
 CAATGTATTG GCCTGGAAAGG TGGGGTTGG GATTTNGGGG GCTTGGTGCC AAGCTTCCT 420  
 TTTNNANGNT GACCTTNTT TNGTNCTTNC CCCTTGGGG NGGGNTNAAA AGNCCAAAGT 480  
 TTGANANTGG GAAATAAANT TTTTTGGGC CTCCGGNTTT CCCTNAAA 529

2153480

SEQ ID NO:4238

LENGTH:365

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05039

SEQUENCE DESCRIPTION:

GATCGTTTC TGATTGTAT GCTTCACAAA CTTGGATTG ACAAAAGAAAA TGTTTATGNN 60  
NGAATTGCGA CAGTGTATTG GCAACTNTCC TCAGTTCAGA TTTGACTGGT TTCTTAAGTC 120  
CAGAACTGCA ATGGAGCTCC AGNGGAGATG TAATACCTTA ATTNCCTGA TTGAAAGAGA 180  
AAACATGGAA CTAGAAGAAA AGGAGAAAGGC AGAGAAAAAG AAACGAGGAC CAAAGCCTTC 240  
ANCACAGAAA CGTAAAATGG ATGGCGCACC TGATGGTCGA GGTAGAAAAA NGTGGCTGGA 300  
ANCTATGNNT ATGGTTTNT TTCATAAAATC ACTNAGCTT ANACCNAGTA GTTCCTNTNA 360  
NTTTN 365

SEQ ID NO:4239

LENGTH:114

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05040

SEQUENCE DESCRIPTION:

GATCATTACA ACANTGTNT GCCTCCAAGT CCTTGAGGCA GCAAGTCTGG GGCTTCTGTN 60  
TCNTTGAGG GTGTCTTCTG GGTAGAGCGA TGGGAAGGAA GGACCCTTAC CCNN 114

SEQ ID NO:4240

LENGTH:312

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05041

SEQUENCE DESCRIPTION:

GATCATCCGC GGCGGCCGGG CTCGTGGGGC GCCTGGAGTG AGGGTTCTGG TTCCCGCCGG 60  
CGAGGATTGT TAAAATNAGT CTTCGGAAGN AGACCCCTAG TGACTTCTTA AAGCAAATCA 120  
TCGGACGACC AGTTGTGGTA AAATTAATT CTGGAGTGGA TTATCGAGGG GTCCTGGCTT 180  
GCCTGGATGG CTACATGAAT ATAGCCCTGG AGCAGACAGA AGAATATGTA AATGGACAAC 240  
TGAAGAATAA GTATGGGGAT GCATTTATCC GAGGAAACAA TGTGTTGTAC ATCAGTACAC 300  
AGNAGAGACG GN 312

SEQ ID NO:4241

LENGTH:306

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05042

SEQUENCE DESCRIPTION:

GATCGGAGTA CANAGTNACA NTTGGAGGGC AGGGGGACTN TAAGGCAAGG AGATTACAGT 60  
TGGGAAGGAG GCAGTGGCAG AGGGGTGAGG GACAGGGGCC CTTAAGTCCA GCGAGGAAAG 120

01339

2153480

CTCGGTGTGG GCCCGTCTAC GCTCCGTTG GGGTGACCTG GAACGCCTCT TCTACAGCTC 180  
CTNCAGCATC AGCAGCCTCT TGTCAGTTT TGCCCTGCCA ANTCTATCCC AACCCAAATA 240  
AGACACTTTC TTCACGNAT ATTATCTTG TCCTTCTTT TTTAAGAAC A TCACAAAACC 300  
ATGAAA 306

SEQ ID NO:4242

LENGTH:287

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05043

SEQUENCE DESCRIPTION:

GATCTAAAC CCAGCTTGA CAGACTAGAA GTTAAGTTA ATACAGAAAA TGCCGTTC 60  
ACTTGAAAGA AAAGACCTAC TTTTAAATG GACACTATCT TGTTCTTT TTTTAAGTC 120  
ATCTTTTGT TATAAGTGC CTTGTCTGG AATGTCTGAA AAGTAGTAA TGCTTTNGG 180  
TATTGAAGTA ATGGGTAAC AAAATGGACT TCCATAGTAT TGACTGTAGA AGGACCTCT 240  
ACAATATTGA CTATATATNN NNATAAACTA CTGGCAAGGN ACTTAAA 287

SEQ ID NO:4243

LENGTH:324

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05044

SEQUENCE DESCRIPTION:

GATCTCCACT GTGGGTGGG TGGGCCCTGC CGGGACCCCTG CTTCACAGGC AGGCTTTCC 60  
TCCAACCTGT GGCGCTGCAG CAGGGCAGGA AGGGGAAACA CAGCTGATGA ACTGTGGTGC 120  
CACATGACCC TTGTGGCACA GATGCCACG TATGTGAAAC ACACATGGAC ATGTGTCCCA 180  
GCCACAGTGT TATGCTCTGT GGCGNGCTCA CCTTGTCTGA GTTCCGGGGT GCAATGGGG 240  
AGGGAGGGAG GGAAAGCTTC CTCTAAATC AAGCATCTT CTGTTACTTG ATGTTCAATA 300  
AAAGAATAGT TGGCAAGGCT GAAA 324

SEQ ID NO:4244

LENGTH:65

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05045

SEQUENCE DESCRIPTION:

GATCATTCAAT ATGTGTACAT AAAATTTAA AAATAAAGGG AATTGACTGC TTTGTTAATG 60  
AGAAA 65

SEQ ID NO:4245

LENGTH:288

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05046

SEQUENCE DESCRIPTION:

01340

2153480

GATCCAGAGA ATGAATCCCT GACCGCATCA CCTAAACTGT CTTCCAAACA TGAGACAAAG 60  
CTGACTGTTC AACTGATTG CCCAGCACAT ACCGTCTTGC CAGTTCTTC TTTTCTCCA 120  
GTCTCCTGTT CATCCATTCT GTTCTCCCTT GGGGTGGGAA TCTATGATGG AGGTTACTGG 180  
GGAAACAGCT CAGCAGATT TTGGAGACCA AACCAAAGGT CTCACTAGGA AATTATCTG 240  
TTTAAACACA TTGCTCCCTT CCTGGCTCTG CTAAATTGAA TGCTCATN 288

SEQ ID NO:4246

LENGTH:333

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05047

SEQUENCE DESCRIPTION:

GATCTCTGCT CCTAACGATG AAGACTGGGC CTATTACAG CAGCTCTCTG CCCTCAGTGG 60  
TCAGGCGTGC AATTTGGTC TGGGCCACAT AACCATTCTG AAGCTTTAG GCGTTGGAGA 120  
GGAAGTTGGG GGAGTGTAG AACTGTTCCC ATTAAATGGG AGCTCTGTTG TTGAGCGAGA 180  
AGACGTACCA GCCCATTGG TGAAAGACAT TCGTAACAT TTTCAAGTGA GCCCGGAGTA 240  
CTTCTCCATG CTTCTAGTCG GAAAAGACGG AAATGTCAAA TCCTGGTATC CTTCCCAAT 300  
GTGGTCCATG GTGATTGTGT ACGATTTAAT TGN 333

SEQ ID NO:4247

LENGTH:288

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05051

SEQUENCE DESCRIPTION:

GATCCTCCAC AGAGAGGAGG GGACCAATTG TGGACAGACA GATGTTGGGA GGATACAGAG 60  
GAGATGCCAC TTCTCACTCA CCACTACCAAG CCAGCCTCAG AAGGCCAG AGAGACCCCTG 120  
CAAGACCACG GAGGGAGCGA CACTTGAATG TAGAATAGGC AGGGGGCCCT GCCCCACCCN 180  
ATCCAGCCAG ACCCCACGNT GACCATGCGT CAAGGGNCTA GAGGTGGAGT TCTTAGCTAT 240  
NCTTGGCTTT NAGAGCCAGC CTGGNTCTGN CCNCTCCNC CATGGGGN 288

SEQ ID NO:4248

LENGTH:170

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05052

SEQUENCE DESCRIPTION:

GATCTCTAAG TGACCACCAAG GGGCTCTGAA CTGCAGCTGA TGTTATCAGC AGGCCATGCA 60  
TCCTGCTGCC AAGGGTGGAC ACGGCTGCAG ACTTCTGGGG GAATTGTCGC CTCTGCTCT 120  
TTTGTACTG AGTGAGATAA GGTTGTTCAA TAAAGACTTT TATCCCCAAA 170

SEQ ID NO:4249

LENGTH:136

TYPE:nucleic acid

TOPOLOGY:linear

01341

2153480

CLONE:HUMGS05053

SEQUENCE DESCRIPTION:

GATCTACATA GATTTGGAAA CTGTTTCCT CTGTTTGGT CTCTGGCA ACATTTGG 60  
CCCAAGTTG GGCAACATT GGCCCAAGNT TGGCATTG GGCAGTAGCT GTATGGNAGA 120  
AAAAGAGTAA GAGGA 136

SEQ ID NO:4250

LENGTH:100

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05054

SEQUENCE DESCRIPTION:

GATCNNTG C TTAGNGTGT AAAGTNTGTC TCTAACAGA ATTATTTGTA AAAGTTAGGA 60  
GTTCTTTT AAATCATTAA AAGAGGCTTG NTGAAGGAAA 100

SEQ ID NO:4251

LENGTH:204

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05055

SEQUENCE DESCRIPTION:

GATCCTAGAG CCCTTCACTT CGGNTTACTC CCTTTTTT GCCTCTNTTT NTTAGTTGGA 60  
AGAAATAAAC TCACAAATT TGTCAGTA ATTNCCGGG GAAAGTAAAG CCTCAGGAAT 120  
GCCCACCGCT TTTTCCAAA GCCTTTNTCT CTGAGACCTC TTAAGTTCTA AGATTAATG 180  
CCCCCTCGCTG TTTCTCCTCT GAAA 204

SEQ ID NO:4252

LENGTH:310

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05056

SEQUENCE DESCRIPTION:

GATCAAGGAG CAATTATGAA GGTCTACAAG CAAGANCAAG AGGAAGAATT ATNGAAAAAG 60  
TTGGCAAATG NCCCCAGATG GAAGAGATAc AGGAGATGGA TGAAGAATGA AGGGCCTGGG 120  
CGGTAAACAT TTGTGGATGA CTGANGATTG ATGGAATGCT ACTATGCCA ACCTTAATTG 180  
TGATATTATT TTCATAACTG ANTTATTTA GAAATGTATC ANTNGACTGC TGCTCAGCAG 240  
TAACTAAAAT TCCTCAAGTA TTGATTAAA CAGATTAATG TCAAANTTA AACCTCCCT 300  
TAAACTTTN 310

SEQ ID NO:4253

LENGTH:267

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05058

SEQUENCE DESCRIPTION:

01342

2153480

GATCTAATTG CATTGGTTAA AAGCAGCTAA CCAGGTCTT AGAATATGCT CTAGCCAAGT 60  
CTAACTTTAT TTAGACGCTG TAGATGGACA AGCTTGATTG TTGGAACCAA AATGGGAACA 120  
TTAAACAAAC ATCACAGCCC TCACTAATAA CATTGCTGTC AAGTGTAGAT TCCCCCTTC 180  
AAAAAAAGCT TGTGACCATT TTGTATGGCT TGTCTGGAAA CTTCTGTAAA TCTTATGTTT 240  
TAGTAAAATA TTTTTGTTA TTCTAAA 267

SEQ ID NO:4254

LENGTH:307

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05059

SEQUENCE DESCRIPTION:

GATCANAAC TAAACGGGCC GGNNTTTCTA AGGTGTNGGT ATGTGGGAG TGGTACAAA 60  
TGGTCTGATG CTCCTCAAA AACATTCACT TTTTACAACG TCAAGGAATT AAGCATAAAA 120  
AAGATTGGTT AAAAGCTTG GTTCTAGTA AAGGTTAGTG TGTGTGGTTT TTTTAAGAAG 180  
CTGTNTTGCT AAATNATTT TACTTGAAT GTTCAAAACA GATTCAGGC TGCAAAC TTG 240  
TTTNATAATC GTNNGCTTCT CCAAGTGAAG CTTCAGGAAT ACCTGGAAA TAGCTGTAAC 300  
GTTCGCN 307

SEQ ID NO:4255

LENGTH:297

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05060

SEQUENCE DESCRIPTION:

GATCTAATAA AAATTGAAAT ATGCCCTTTA GAATGGCTTT CAAAGATAAC AAATGCTGGA 60  
GAGGATGTAG AACAACTGGA ACCTCTCGGT TATTGCTGGT GAGACAGCCG CTTTGAAAAAA 120  
GTTTGAGTTT CTTACAAAAT TAAACTTACA CTTACACTTA CCATATGACC CAAAAATTCC 180  
ACTGCTTGCT CTTTACTCAA GTATAAGGAA AATCTATGTA CACACAAAAC TNGTACGTGA 240  
ATATTTATTA ATAGTCATTT TATGCCCAA ACTAGNAATA GTCCAAATGT TCTGGGN 297

SEQ ID NO:4256

LENGTH:208

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05061

SEQUENCE DESCRIPTION:

GATCTNTATT NTTTNGCAA CAGACTTCAA GTGGTCCCTC TTTTTCCCT ACACACTCAG 60  
CTCTTCTCTA AAAGCAAGGA TTGGAATGA NCAATTCACT TTGACAGAAA AAGCTGAATA 120  
AAATGGCAGTC TGTAATTGAN TTGTTGGAAA TGCCTTTTN GCTCCTAAAT NTTAAACATC 180  
ATTAATAAAA TANTGTTCA CAAAGAAA 208

SEQ ID NO:4257

LENGTH:208

TYPE:nucleic acid

01343

2153480

TOPOLOGY: linear

CLONE: HUMGS05062

SEQUENCE DESCRIPTION:

GATCACAGGA AGACTTGTAGGACAGTTT AAGTTCTCCT GCAAGGTTTA ATTTGTTATC 60  
ATGTAAATAT TCCAAAGCAG GNTGCCTTGT GGTTTGGCC AGCCTTGTC TATGTTGATA 120  
AGATTGATTT ACTGCTTAAA ATCACTTTAC TTTATCCAAT TTTTACTGAA CTTTTATGT 180  
AAAAAAATAA AATCAATTAA AGAACAAA 208

SEQ ID NO: 4258

LENGTH: 126

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS05063

SEQUENCE DESCRIPTION:

GATCAGTTT CTATTTAAT GTGTAAAAAA ATAACATTGT CGTATCCAT TTAAAGGCCA 60  
ATTTCTGTAT TCAGGCAGGC ATATGTACAT ACATGAATAA AGCCAACAAA AGTGTGCACA 120  
TGTAAA 126

SEQ ID NO: 4259

LENGTH: 552

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS05064

SEQUENCE DESCRIPTION:

GATCGGGGTG CCCCTCAGCC TTCAGACACT CTGAGCCCCA GANGCAGCAA AGGGTGAGCC 60  
TCCTGCCTG GTTCTACCA CCATCTGGTG GTCAATGGCG GGAUTGCAGT CGGCCAGGGA 120  
CTGCGGTTGA CCTACACCTT CCTCCCTGA GACATCAGCT GGCATGCCTC CAAGCCCTCT 180  
GCGCATGCC TCATTCTCTC CTGCCCCCTG GCTGACTTTG CATGTTGACT TGAACCCCTC 240  
TGGGAAATCT NTGTGCATGT CCACAGCCCC TGGTTATGCT CTCACAGCCA CTGCCCCCTNT 300  
CTNTGTTCA GCTGAGCTGG CTGACCGACC CAATCCCNCT AACCGGCCTC TGCCCGNTGA 360  
NCCGGTGGTT GAGAACCCCG AAGTCTNAGG GGGCCAGCAA GGCCCCAACC NCAAGGNAGG 420  
CAATTGCTTG CNGGACCCCA AGGGGNCGGN TNGCCAATGG GGGTGNACTT TGCCGGGCCA 480  
AAGGGGNTNN GAATTCGGG CNCTTAAGTN GTNACCCCTTC AANANNAANG GGGCAACGG 540  
GTTTNGAAA AN 552

SEQ ID NO: 4260

LENGTH: 180

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS05065

SEQUENCE DESCRIPTION:

GATCAGACCT TCTTGGGGTC TTCTGCCAG AGCTTGTAC CAGCCCCATG GCCTCTCCAG 60  
GCGTGCTCAT GCCCACAAACC CGGGGCCAGC CCCACGTGGT GCGGTCAGC CTTCTCTGCC 120  
CCTCCTGGGA ATCTGTCATT CGTGGGTGCT TCAGAGTAA ATCAATGAGT TTCTGAGAAA 180

01344

2153480

SEQ ID NO:4261

LENGTH:553

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05066

SEQUENCE DESCRIPTION:

GATCAGCGTG CGGGGTGTGA AGATAGGCGT CAAGGCCGAT GACTCCCAGG AGGCCAAGGG 60  
GAATAAATGT AGCCACCTTT TCCAGTTAAA AAACATCTCT TTCTGCGGAT ATCATCCAAA 120  
GAACAAACAAG TACTTTGGGT TCATCACCAA GCACCCCGCC GACCACCGGT TTGCCTGCCA 180  
CGTCTTGTG TCTGAAGACT CCACCAAAGC CCTGGCAGAG TCCGTGGGA GAGCATTCCA 240  
GCAGTTCTAC AAGCAGTTG TGGAGTACAC CTGCCCCACA GAAGATATCT ACCTGGAGTA 300  
GCTGTGCAGC CCCGNCCCTC TTGGGGTCCC CCCAGCCCT NAGGGCCAAG TTGCCAGGG 360  
CAAGCTTGGC TTGCTGGACA AGGGATGTTG GCAACTTGNT TTNAGGGAGG GGGGCAACTT 420  
GNCCAACCGG CCANNNNGGN CAAAGGAAA GTTNGGGGG NCCCGTTGG NCCAANGGGT 480  
TAGGGGGAAG GGGTGGGGG GNAATTNGGG GGNGGGNGGG AAATTNCNA GTTTANTTG 540  
TTAATTTTT AAA 553

SEQ ID NO:4262

LENGTH:314

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05068

SEQUENCE DESCRIPTION:

GATCTCCCGG ACCCCTGAGG TCANATGCGT GGTGGTGGAC GTGAGCCACG AAGACCTGA 60  
GGTCAAGTTC AACTGGTACG TGGACGGCGT GGAGGTGCAT AATGCCAAGA CAAAGCCGCG 120  
GGAGGAGCAG TACAACAGCA CGTACCGTGN GGTCAGCGTC CTCACCGTCC TGACCCAGGA 180  
CTGGCTGAAT NGCAAGGAGT ACAAGTGNAA GGTCTCCAAC ANAGCCCTCC CAGCCCCAT 240  
CGNGAAAACC ATCTCCAAAG CCAAAGGGCA GCCCCGAGAA CCACAGGTGT ACACCCCTGCC 300  
CNCATCCCGN GACN 314

SEQ ID NO:4263

LENGTH:176

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05069

SEQUENCE DESCRIPTION:

GATCCAGGGA ACAATGACTA TAGGTGAGCA GATGCTTTAA ATTAAGGAAA GATGGAGAAG 60  
AAGCCAACTA GGAAATTAGA GAACACAGCA AGCAAAGAGA AGCAAGCGAG TCCCCTTGAG 120  
TGATGCCAAT ACTTTTTTT TTTTTTTTG NGANANATT TNTNNCCANT NTGGTN 176

SEQ ID NO:4264

LENGTH:389

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05070

01345

2153480

SEQUENCE DESCRIPTION:

GATCTTNAAG GAAAGACGGA TTGCNTTAGA AATAGACAGT ATATTTTNG TCACAAGAGC 60  
CCAGCAGGGC CTCAAAGTTG GGGCAGGCTG GCTGGCCCGT NATGTTCTC AAAAGCACCC 120  
TTGACGTCAA GTNTCCCTCC CCTTTCCCCA CTCCCTGGCT CTCAGAAGGT ATTCCCTTNG 180  
TNTACAGTGT GTAAAGTGTAA ATCCCTTTTC NTTTATAAAC TTTAGAGTAG CATGAGAGAA 240  
TTGTATCATTT GAACAACACTA GGCTTCAGCA TATTNTAGC AATCCATGTT AGTTTGNA 300  
TTTCCTGTTG CCACAAACCC TGTTTTAAT ACTGTACCTT TANTTAAATT TCNNNGTTNN 360  
TAGTTTTTG CAACAGGTTT TTCCCCAAA 389

SEQ ID NO:4265

LENGTH:436

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05071

SEQUENCE DESCRIPTION:

GATCACCATG AAAGAAGAAT AGTTTTTGT CCCCAGAGAC ATTCAATTAG TTGATATAAT 60  
CCTACCAGAA GGAAAGCACT AAGAAACACT CGTTTGTGT TTTTAAAGGC AACAGACTTA 120  
AAGTTGTCT CAGCCAAGGA AAAATGATAC TGCAACTTTA AAATTTAAAG TATCTTGCAC 180  
TGATAAAATAT ATTTAANANT TGTATGTTA TAAAGTTATT AATTGTNNN GNCGNTGTTA 240  
CAAAATGTTG AGTTTATATT GTTTAGATT GTTTGTAAT TTTAAAGGT GTAAAATAAC 300  
ATATTTNTCC TTATGGNNA TCTATAAAC TTTCTGGTAG TAAAATGTT TCATTNTTAC 360  
TGGGTATATT ATTTGTTCC ATGNNTTTG TNCCNTCCA TAAGGNTTN NTGCCAGNTT 420  
TTTTTTTNN CAGGNN 436

SEQ ID NO:4266

LENGTH:533

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05073

SEQUENCE DESCRIPTION:

GATCTGTCCC CATCCGAAGA GGCTTGTGA ACTGCCTGCT GAATGGAAGG AAAGCAACTT 60  
TAAAACATT AGAGTTTGC TGAGTATAGC CAAATGCCCTG TNCTGAAACT TATAGGAAAT 120  
TGGAAATTG TTTAAAATT TACACTTTAA GGTAGCAAAT GTCAATTATT NGNCCGAGCA 180  
TATTGTGAAG AATTAACACTA AAATTAATAC GTACAGTTT CTCTAATTAG GTGACTGTT 240  
ATAATGGGTA TATTGGAAT TTAGAAGAAA TAATTTGTA GNACTTGTGG CCCTTATGTT 300  
TAACAGATTA ATTCAAGCATT GGCGTATTTN CTTTGTCCCA ATACAAGGAT GCCAAAGGAG 360  
GGAAACAGGA AAAATTGCCG TCCCATTAA AAAAATTAA GGGGTTTGGN TGGTTTAAA 420  
CCCNAAATT TGTTCCCAN GGANCNTTT TTTGGGGACC TTNCTAAATT TTTGGGGGN 480  
CATTTNAAN TTAAAGGNAT TGNNGGNNC NAAGGNNGTN TTGANTTNN TGN 533

SEQ ID NO:4267

LENGTH:124

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05074

01346

2153480

SEQUENCE DESCRIPTION:

GATCAAGGAA GAGATGGAGG CTTCCCCGA AAAGTTCTAG CTGAGTGGCA GAAGTGAGAA 60  
TTTGTAAACT TATGTACAAT GTACGTGTAA ATAAATGGAT TGAATTCAG TTTGTATCA 120  
GAAA 124

SEQ ID NO:4268

LENGTH:451

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05075

SEQUENCE DESCRIPTION:

GATCTGGAC AGATTCACT CTCACCACATCA CCAACCTGCA GCCTGAAGAT TTTCCAACTN 60  
ATTACTGCCA ACAGTATGAT AGTTACCCGC TCACCTTCGG CGGAGGGACC AAGGTGGAGG 120  
TCAATCGANC TGTGGCTGCA CCATCTNTNT TCATCTTCCC GCCATCTGAT GAGCAGTTGA 180  
AATCTGGAAC TGCCTCTNTT GTGTGCCTGC TGAATAACTT CTATCCCAGA GAGGCCAAAG 240  
TACAGTGAA GGTGGATAAC GCCCTCCAAT CGGGTAACTC CCAGGAGAGT NTCACAGAGC 300  
AGGACAGCAA GGACAGCACC TACAGNCTCA GCAGCACCCCT TGACGNNTAG CAAAGCAGNC 360  
TACGNNGAAC ACANAGTNTA CGGCTGCGAA GTTNACCCCN TCAAGGGCCT TGAGCTTNGN 420  
CCNGTCACAA AGGNGNTTN AACAGGNGG N 451

SEQ ID NO:4269

LENGTH:197

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05076

SEQUENCE DESCRIPTION:

GATCTAGAAA CTGAGTTGTG GAGCTGACTC TAATCAAATG TGATGATTGG AATTAGACCA 60  
TTTGGCCTTT GANCTTCAT AGGAAAAATG ACCAACANT TCTNAGCATG AGCTACCTCA 120  
TCTCTAGAAG CTGGGATGGA CTTACTATTC TNGTNTATAT NGNAGATACT GAAAGGTGCT 180  
ATGCTTCTNT NATTATN 197

SEQ ID NO:4270

LENGTH:69

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05077

SEQUENCE DESCRIPTION:

GATCCCACATCC CCTTGCTCTGA ACTGGAGCCA TGGGCACAAA GGGCCAGAT TAAAGTCTTT 60  
ATCCTCAAA 69

SEQ ID NO:4271

LENGTH:54

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05079

01347

2153480

SEQUENCE DESCRIPTION:

GATCTTGCCT CCCATCAGCC ATCTTCTCC CAATAAATT TTGTTTGTG CAAA

54

SEQ ID NO:4272

LENGTH:103

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05080

SEQUENCE DESCRIPTION:

GATCTAACCA ATTAAATAT GANTTCATAC TCNAAGTAT CAACAAAAAA ATGAAAAGAA 60

ATAGCTGGTT TGGNTGTAAG AAATGGTGT ATTAAATGGNT TTN 103

SEQ ID NO:4273

LENGTH:449

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05081

SEQUENCE DESCRIPTION:

GATCACTGCT GGCCTACTCT GGTTACGGGG AACTGACGC CCGGGTCACC GCTGCCATAG 60

CCAGTAACAT CTGGGGCGCC TACGACCGGA ACGGAAACCA AGCGTTAAC GAAGACAATC 120

TCAAATTAT CCTCATGGAC TGCAATGGAGG GCCGTGTAGC CATCACCCGA GTGGCCAACC 180

TTCTGCTGTG TATGTATGCC AAGGAGACCG TGGGCTTTNN NNTNCTCAAG GCCAAGGCC 240

AGGCTTGGT GCAGTACCTG GAGGAGCCCC TNACCCAAGT GGCGGCATCT TAACGGCATT 300

GGTGGAAAGCT GGGGGTCAGA AAAGAGAAAT GACCCATTG NGAGGGCTG GGGGNCTCC 360

TAGGAAGAAC CTTNTTCTAGG ACAATGGGG GNAAGGGATG GGACTTTNN TTTTTTCCC 420

AAGNATTAAA ACTTNAAACT CCCTGTAAA 449

SEQ ID NO:4274

LENGTH:247

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05082

SEQUENCE DESCRIPTION:

GATCTNCATA ANCAGGGTTC CTGAGCTCAC TGAAAAGACT ATTGTCCCTT AGGAAAAGCA 60

TTTCCTGTGT NTCGTNAGCA TCTGGCTCCA GGACAGACCT TCAACTTCCA AATTGGATAC 120

TGCTGCCAAG AAGTTGCTCT GAAGTNAGTT TCTATCATNC TNCTCTTGA TTCAAAGCAC 180

TGTTTCTCTC ACTGGGCCTC CAACCATGTC CCCTTCTCCT NAGCACCACA AATAATCAAA 240

247

SEQ ID NO:4275

LENGTH:424

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05083

SEQUENCE DESCRIPTION:

01348

2153480

GATCATTCC CAAGATTGGT TTCCCTTGAG TTTTGCTAA AACAAATCTT AGTAGTTTG 60  
CCC GTTAAA ACAACTCACA ATCGTAAATG CTACTATTCC TAAGATATCT NACCTTTNA 120  
TTTCAGTTA GCCATGTATT GTATGAGTGT ATTAGTCTAA GCAGTGAGAA TCTTTNCTAT 180  
GCCTCTATTC CAGCAAAAAG TAGAAGTATC AAATAAAANG GGCAACTTTT AAAATATTAA 240  
GCCTGAAGAC TTCTAAAANG ACANGANACA TGGCCTAANT ANCCAACATA GGATTACAT 300  
AGTANGTTTC ACACTACCTT ATTACCAAAA GCAAACCACC TCTTACTTTT NNCTACATT 360  
TATCCATGTA TATCTNTNGT ATGCTGGTCT TTNCTTTT NGCCAANTC NANCATTTT 420  
TGNN 424

SEQ ID NO:4276

LENGTH:308

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05085

SEQUENCE DESCRIPTION:

GATCTAAAAC TTCTGTTGCT TTTGCCATTC CAAAACTTG TCTTTGCCAG AAAAGTGTG 60  
GTA ACTATAA AGAAAATTAT ATATGANAC GGCAGTTGC ACTGTGTTG AGTAGAACGT 120  
GTAAATGAAT TGTNCCCACC TTTGGTTTGC CAGTAAGTGA CTGGATTCTT GGCACATTAA 180  
TGTTCACCAA AGTAGAACAA GAAGATATTA TTNCATTTA TCAAGCAAA GGAATTTAA 240  
GATTTNTTT TTNCNTAAA ACCAANTGG GATTTNNNN TTTNNNTTN TTTGGGGAA 300  
AAGGNTTN 308

SEQ ID NO:4277

LENGTH:374

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05086

SEQUENCE DESCRIPTION:

GATCGAGTCC GCCATGGAGA GGGACCGCTA CATGAGCCCC ATGGAGGCC AGGAGTTGG 60  
CATCTTAGAC AAGGTTCTGG TCCACCCCTCC CCAGGACGGT GAGGATGAGC CCACGCTGGT 120  
GCAGAAGGAG CCTGTAGAACAG CAGCGCCGGC AGCAGAACCT GTCCCAGCTA GCACCTGAGA 180  
GCTGGGCCTC CTCTCCAGAN TCATGTGGAG GGGCCAGAGG CTGCCAGACC CCCAGCTGGG 240  
CCCTGCTCAC CCCTTGTTC TGGGCTTGGGA GGGGCCTNTT GAGGAACCTT TAATTGAG 300  
GGGTGCCCGN TATGGACGGG GCATTNCAGC TGAGACACTG TGGATTTAA ATAAATCTT 360  
TTGTGGTCTT TAAA 374

SEQ ID NO:4278

LENGTH:510

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05087

SEQUENCE DESCRIPTION:

GATCTGTGCT TTCCAGCTCA CCCCCCACAC TCACTCCTGA GACCCCTGGC CTCCGGCGTC 60  
ACNTCCAGCN TCTGTTCCCC TAGTAAGTGC CTTCCATGTC GGCCTCTAAC CCCAGGCC 120  
GAGGACCCAG ACCCAGTGGG GAGGCGGACG TTCCAGCCGG CATGGNTGGG AACTGCAGAC 180

01349

CTGTCCCTCCT GGTGGGTCCA GGGGCCCCCTC CAGCTTGTGG AGCCCCACAN TGGGGTGCCG 240  
 CCTGCCCGTT TTTTCCCCTA GGAGCCCCAG CCCCTTTGG GCCCAGGGAC ACCAGCCAGG 300  
 CTCTGTGCTG ACCCTCCTGT TGCAACCAGN CCTGGTNTCA GCAGCGACCA CCCCTTGCNT 360  
 TCACCCTTTG GAGCTTTGC AATGTTCCA NTAAANCCCN GGGNTGGGTT NGGNAAGGTT 420  
 GGGAGGTTGT TAAGGGTGT TNGGTGNCT TTTGAAAGG GGNAGGATNA ATTAACCTTG 480  
 ANCCNNNTGGG CGGGNGNGNC TTTGNGGTN 510

SEQ ID NO:4279

LENGTH:466

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05088

## SEQUENCE DESCRIPTION:

GATCTAGCTT GGAGAGCTTG TGAATCTTAG GAGAGCTAGG CATAGAACATGA CTAAGTTTG 60  
 TCACCGCATG AGATAAAAATA AATGAAAAGC CACTTCTGGA GGGAAATGAGG CAGTCGCCT 120  
 TTNTTGGAGA GATACATATT GTTGAACAGC TCTGGGCAGT TGATTGTTTG CCTGGGAGAG 180  
 CTAACCATGT TTACTCTACA CTTGACCTGT GATGGTCTGT ATTGATTGTN TCACACGCTT 240  
 AGCTTTCTAA GGCTAACCAAG GTCATCGTCC TCAGTCCCTG CCTGCAACTA GGTTGCCAAC 300  
 TGGCCCTTGA TTTCCACCC AACTTGTCA GTTGCCCTC AATCTGGGG CCTCACTNAT 360  
 TTCCCCAAAAA NGATATGGTT TGGTACCAACC TGTAGTTNC CTGTTGCATG GTAAACCTG 420  
 ACTTTTGGG GAAACTNAAA ATANAACANT TTTCAAAAC GGGAAA 466

SEQ ID NO:4280

LENGTH:470

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05089

## SEQUENCE DESCRIPTION:

GATCGAGCCA CTGCTGAAGA ATGTCTAAAG CACCCCTGGT TGACACAGAG CAGTATTCAA 60  
 GAGCCTCTT TCAGGATGGA AAAGGCACCA GANAGCAA ATGCCCTCCA AGAAGGTCA 120  
 TCTNTGCCTG ANATTAATTC GGATACCGAC AAATCAGAAA CCGAGGAATC CATTGTAACC 180  
 GAAGAGTTAA TTGTAGTTAC TTCATATACT CTAGGACAAT GCAGACAGTC TGAAAANGAG 240  
 AAAATGGNGC AAAAGGCCAT TTCCAAACGA TTTAAATTG AGGAACCTT GCTACANGAN 300  
 ATTCCAGNG ATTTATCTA CTGAGCAATA TTCCCTTTN GAACTTCAAG ATTTCTNCAC 360  
 TGNANAATTN TTAATTTTN TTTTTGGG GCCCTCTGGG CCAAATTGGN GNATGTTCC 420  
 TTTGNAGGTG GGTTAACCCA GTNTCACTT TNCACCAGTC CANNTNTTN 470

SEQ ID NO:4281

LENGTH:476

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05090

## SEQUENCE DESCRIPTION:

GATCTACAGT CACCATATAT ATCAGCAGGA CCTAAGGNAA AAGATTTGG ATGTTGGGAA 60  
 AAGGTTAGAT GTGACTGGAT TTTGCATGAC AGGNAAGCCT GGTATAATCT GTGTGGAGGG 120

2153480

TTTCAAAGAG CACTGTGAGG NGTTCTGGCA CACAATTAGG TACCCCAATT GGAAGCACAT 180  
TTCCTGTAAG CATGCTGAAA GCGTGGAGAC AGAAGGAAAT GGTGAGGACC TGCGCCTTN 240  
CCATTCTTT GAAGAGTTAC TCCTTGAGGC TCATGGTGAC TATGGATTAN GGAATGACTA 300  
TCACATGANT CTGGGCCAAT TCTTAGAATT TNTCAAGNTG CACAAAATTT NAGGCATGTT 360  
TTTTCCNGT TACTATTTG GGTNTNTNA AGCAAAAANT TTCAGNCTTC NTAAAAAGCG 420  
GNTTAAAGGG GGNCTATTG NCCTGTNAAT TTTCCACTNA GGNCAGGTNT TTCTTN 476

SEQ ID NO:4282

LENGTH:277

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05092

SEQUENCE DESCRIPTION:

GATCTGAATT GTNCGAAAAG CAGCCAGTGC CTAANTTGT A GCTCCACTTA TGCCAAC TGT 60  
ATATATAACCT CTCGTGAGCA TAGCAAGTNA TTTANTATT TNAAAAGATG GCTAAAATCC 120  
TTTAATGAA CAGCACTAAA GTTATATGT A TTAGAGGAGA ATTATTGANT GANATGGAGA 180  
AAGAGTTCTG AAATTANTAT TTNCATTTGG GCTTTTTAC AGATAATATT ATATNNCTAA 240  
GTGACCAGAC GAAAGAGAAG GGNNTAGAAA AGGNTGN 277

SEQ ID NO:4283

LENGTH:314

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05094

SEQUENCE DESCRIPTION:

GATCCCCAGA CCTCACTTGC CTCTGCCTCC ATCTTGGCCC TGATTCAACC CTAAGATAAT 60  
AGCACAACAA AATTCTNCAT AAAGATATTT TAATTCA CCT GTNCCGTGCT ATATGGAGGA 120  
GGCCAAGTCC ATTTAGTGC ATTNCNTCCC ATAATGTGAG TGGGGAGGAT TGTGGGGAGG 180  
AGGGGCTTTG GGTTCTGTG TTTGTGCATA TGAAGGGAGA TGGGGTTAG GTGGAGGAGG 240  
AGAGCAGCGT GGTTAGCTAA GGTTATTGCT TTTGTGGCA AATCTAATTA AATGACAGGA 300  
ATCTCTTCAC GAAA 314

SEQ ID NO:4284

LENGTH:489

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05095

SEQUENCE DESCRIPTION:

GATCTCATG GAGCTGAATG ACGCCCTGGTC GGAGTTGAG AACCAAGGGCT CNCGGCCCC 60  
CTTCTGAGGC CGCAGTGGTG GTGGCTGCAC ACACAGCTCC ACAGGTTGGG AGCCGTCGTG 120  
GGACCTGGGT CCCCCACCGT AGGACCCCGT GGGCGACAGA GGTGTGGCA GGGTGGGCT 180  
CCGAGCCCCG GGTCAACCGCC CGCCCCAGCGT TCCAGGCACA TGAAGAGAAA GCATTCCAA 240  
GCCTCTNATT GTTGTTCCT TTTNTCTC CCGAAGAAC A GCTGATTCA GCTCCTCCCG 300  
CAATTNTNAC GTCTGTAATT TATTGGTGT TCGGGCGTN GTCTCTTGG A GCCCCGGCAC 360  
GTTNGTGGGG CCCACGGTT CTTGGCGGT CAATGGGGCC CTTGGTGTG TGCACCGGAA 420

01351

2153480

CTTTGTAAA TCAAGTNCAG TGGGTTGGTN TTGTTACAAG AATTNAAAAC TAATTTTCC 480  
CGNTTGAAA 489

SEQ ID NO:4285

LENGTH:292

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05096

SEQUENCE DESCRIPTION:

GATCATATTT CCCCTTGGAC ACTTGGTTAG ACGCCTTCCA GGTCAGGATG CACATTCTG 60  
GATTGTGGTT CCATGCAGCC TTGGGGCATT ATGGGTTCTT CCCCCACTTC CCCTCCAAGA 120  
CCCTGTGTT ATTTGGTGT CCTGGAAGCA GGTGCTACAA CATGTNAGGC ATTCTGGGAA 180  
GCTGCACATG TGCCACACAG TGACTTGGCC CCAGACGCA AGACTGAGGT ATAAAGACAA 240  
GTATGAATAT TACTCTCAAA ATCTTTGTAT AAATAAATAT TTTTGGGCA AA 292

SEQ ID NO:4286

LENGTH:173

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05099

SEQUENCE DESCRIPTION:

GATCCCAGTG GAGGCTGTAA CCCACCTGCC CCCGCACCAC CCCCCNTGAC CCCTGTTACC 60  
GCATTTGTGT GTATTAAATGC TGAAGAATTA AATGTTAAA GAGTTAAAT TTTGAAGGCG 120  
TTTGTATAT ACAGTTGTCC TGCATTATTA TAAAGAGTT TCAGGAAGTT AAA 173

SEQ ID NO:4287

LENGTH:307

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05100

SEQUENCE DESCRIPTION:

GATCAGAAAT GTGAAGCACA AATGCTGCTT CTCCCCCTCC TGTTCCCATG TCAGAGATGG 60  
AGAAGAAAGC ACAGTGAGCT GTTCACCAAGT CCAGCGGTGA CCTCGGAGTC CTTTGTAAACA 120  
GTGTTCCAA TANCTTCTGC CAATAAAACA GAATTTNNGT TAGAACCTAT CTGCTGTCCC 180  
TCAACTAGTG TCTGATAGCT GAGAATGTAA TTCGTTTNTN TGTCTATTAG AAAATTAGGC 240  
AGGCACCAACA GACAGTAGCA ACATAAAGGA ACCTGCTTAG AAGNGGTTT NATGGNNNN 300  
NNCNCCNN 307

SEQ ID NO:4288

LENGTH:244

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05102

SEQUENCE DESCRIPTION:

GATCCTTAAA TCTCCATTCT GTTGTGGTT GCCCCCTCAA CCTCCCCCTAC ACCCTTCCTA 60

01352

TTCTTTNCA TTCTTCTTGC AGTTCTGGGA GTAAAGCTCC CAGCATATT AGATAATAGG 120  
 GCAGGGGAAG CACCCCTCTT CTTCTAGAC TGGATTATGC TCACATGCTC CCTTGCCCTG 180  
 ACATTTTGT AAATNCTGTG CCCTTGCTG TAGCTACACT TCAGATTAAGA GTAGGAGAAA 240  
 GAAA 244

SEQ ID NO:4289

LENGTH:69

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05103

SEQUENCE DESCRIPTION:

GATCAAAGTT GGCGGGGGCT TGGCTGTGCC CTCAGATTCC GCACCAATAA AGCCTTCAAA 60  
 CTCCCTAA 69

SEQ ID NO:4290

LENGTH:341

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05104

SEQUENCE DESCRIPTION:

GATCTTNAT CCTTTGTGC AAAAGTGTGG ACACCTTTNA NAGCTTGCA GATTNAACT 60  
 CCAGAACAC TTTATGAAAT GGTACACTGA CTAATCCAGA AGACATTTC AACAGTTGC 120  
 CAGTGGTTCC TCACTACACT GGTACTGAAA GTNTAATTNN TTAGAGCCTA AAAACTGGAG 180  
 AAACAAATAT CCTGCCACCT CTAACAAGTA CATGAGTACT TGATTTAAT GGTATAAGGC 240  
 AGAGCCTTN NTTCTCTTC TTGATAGATG AGGCCATGGT GTAAATGGAA GTTCAGAGA 300  
 GGACAAAATA AAACGGAATT CCATTTTTT NTCACTGTAA A 341

SEQ ID NO:4291

LENGTH:395

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05105

SEQUENCE DESCRIPTION:

GATCTTAGAG TCACTTGGA ATAAGNTCTT ACATAAATAC CCCCAGCCTT TTGAGAACGG 60  
 GGCTTGTAA AGGACCGTA TGTAGGGCCC GTACCTACTG GCAGTTGGGT TCAGGGAAAT 120  
 GGGATTGACT TGGCCTTCAG GCTCCTTGG TCATAATTAA AAAATATGGG AGTAGAAAAC 180  
 AACANAGNNT GGAATGGACT CTTAAACAA TGAAAGNGCA TTTATCGTTT GTCCCTTGAA 240  
 TGTAGAATT TTTTTGATT TCATAATTCT NCTGGTAAAT NTGNCAGTTA AAATGGTGCA 300  
 TTATGTATAT ATTANTATAA TTAGANATT CCATTTATA NTTNTTCTA TTCCAGGGTN 360  
 GCATAANGCA TTTNNNANTT TNGGGTTTT GGNTN 395

SEQ ID NO:4292

LENGTH:349

TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS05106

SEQUENCE DESCRIPTION:

GATCATATTT TGCAGTTTA GTAAAAGGGA AATATTGTTA TACATTTNTT AAATATACTT 60  
CCCCCATGAN GTGAAAAGGT TAATTTNCT GANTGTTTA AGTTGAAGTT ACTTCATGGA 120  
TGTCTACACC ATGANGTGCA TTTGGNTGAG ATAGCNGAAA TTTTTTTTA AAAAGTTAA 180  
GTACCAAAGG TAGTCTAGTC TAGAACGATA AGTTAATACG TNTTGGCTT NNTAATTGT 240  
ACTGTAACAT CCTTATACTT TCTATTTNAA GTATATCTGT TTCTTAAGTA AACAACTTAG 300  
ATATTTCCA CACCTTTTT TTTTTTNCC CNTGNNGGT CCNGGGTNN 349

SEQ ID NO:4293

LENGTH:257

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05107

SEQUENCE DESCRIPTION:

GATCTGCCAT TTATTAGCTG TGGGATTTG GGCAAATTN TTGACTTTCT GTGCTTCANT 60  
TTTCTTAGCT GTAAAATTGG AAGAGTTGTT ATGAAAATNC ACTGAAAGTA TATTGTATA 120  
CATCATAGGA TAGTGTAAAGA ATATAGTATG GCTTGAGAA ATGTTCATNA TTATNACTCC 180  
CAGAGGAGTT TTAGGTATTA AGTGATGCCA AATATAATT NTNAATTGTA TAATAAAAT 240  
CTATATNCTT ACTGAAA 257

SEQ ID NO:4294

LENGTH:212

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05108

SEQUENCE DESCRIPTION:

GATCACCATC CCAGTAACCT TCNAGTCGCG GGCCCAGCTT GGGGGCCAG AAGCTGCAA 60  
ATCCGATGAG ACTGCCGCCA AGTAAAGCCT TAGCCCGAT GCCCACCCCT GCTGCCGCCA 120  
CTGGCTGTGC CTCNCCCGTN ACCTGTGTGT TCTTTNATA CATTATCTT CTGTTTTNT 180  
CAAATAAAAGT TCAAAGCAAC CACCTGNANA AA 212

SEQ ID NO:4295

LENGTH:559

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05109

SEQUENCE DESCRIPTION:

GATCCAGTGG GGATGTTGTT ATGACTCAGT CTCCACTCTC CCTGCCGTN ACCCTTGGAC 60  
AGCCGGCCTC CATCTCCTGC AGGTCTAGNC AAAGCCTCCT ATACAGGGAT GGAAACACGT 120  
ACTTGANTTG GTATCAGCAG AGGCCAGGCC AACCTCCAAG GCGCCTCATT TATGAGGTTT 180  
CTAAGCAGGA CTCTGGCGCC CCAGACAGAT TCAGCGGCAG TGGGTAGCC ACTGATTCA 240  
CACTGACANT TAGCAGGGTG GAGGTTGAC GATGTTGGGA TTTACTATT GCATGCAAGG 300  
AACACACTGG NCTCAGACGT TCGGCCAAGG GGACCAAAGG TGGNAAATTC GAACGAACCTT 360  
GTGGCCTTGC ACCNATCTT TTTCATCTT TNCCGNATC TTGGTTGNNGC AAGTTTGNA 420

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ATNTTGGGAA CCTNGCCTCC TTTTTGGTGN TGCCTTGNC TGAAATAACT TNNTTATTCC 480  
CAAGAGGAGG GNCAAANTTC AAGTTGGGAA GGTTGGTTA ACCGGCNTTC CAATTNCNGGG 540  
GNAANTCCCN TGGNGGGNN 559

SEQ ID NO:4296

LENGTH:50

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05110

SEQUENCE DESCRIPTION:

GATCTCTATG TATGTGTGTA TATAAATATA GTTTTTATC TATATATAAA

50

SEQ ID NO:4297

LENGTH:548

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05111

SEQUENCE DESCRIPTION:

GATCAAACGA ACTGTGGCTG CACCATCTT NTCATCTTC CCGCCATCTG ATGAGCAGTT 60  
GANATNTGGA ACTGCCTCTT TTGTNTGCCT GCTGAATAAN TTCTATCCCA GAGAGGCCAA 120  
AGTACAGTGG AAGGTGGATA ACGCCCTCCA ATCGGGTAAC TCCCAGGAGA GTGTACAGA 180  
GCAGGACAGC AAGGACAGCA CCTACAGCNT NAGCAGCACC CTGACGCTGA GCAAAGCAGA 240  
CTACGAGANA CACAAAGTNT ACGNCTGCNA AGTCACCCAT CAGGGCCTGA GCTCGCCCGT 300  
CACAAAGAGC TTCAACAGGG GAGAGTTTA AGANGGGAGA AGTGCCTCCN ANCTGGNTCC 360  
TCAGTTCCAG CNTGACCCCTC TCCNATCCTT TGGCCTGTGA CCCTTTTTT TCCACAGGGG 420  
GNCCTACCCN TTTTGGNGGT CCTCCAGCTC ATTTTTTAA CCTTAACCCC GNTTNNTCT 480  
TCCTTGGGG TTTAAATTAT TGNTTAATT TGGGGGNGG ATTGNTTAA ATAAAGGGA 540  
ATNTTTN 548

SEQ ID NO:4298

LENGTH:415

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05112

SEQUENCE DESCRIPTION:

GATCAGCGCC TGAGAACGTCG TCGGGCGATG TCCCCGCGCC GTGTCCCTCT CCAAGCNCCG 60  
CCCCCTGGGTG GGCTCGGTGG AGCAGACCCC GCGCAAGAGG CTGCGGTGAG CCAATTAGA 120  
GCCCAAAGAG CCCCGAGGGGA ACCTGCCGGG GCAGCGGACG TTGGAAGGGC GCTGGGCCTC 180  
GGNTGGNACC GTTCATGTAG CAGCAACCGG CGGGCGNNTGC CCAGNAGCAG CGTTCGGTT 240  
TTTTTTTAA TTTTAAAAC TGTCAATGT ATTAATAACG TNNTTTATA TCTAAATGGT 300  
ATTCTGCACG AGANGNTACA CTGGGTCCCA AAGGTGTAAA AGCTTTTAA GAGTCATTGT 360  
ATTAAAAAN TNNTTTAAT CTNTGGTTG AAATCTNAA GTGNNAAGT ATTNN 415

SEQ ID NO:4299

LENGTH:156

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TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05113

SEQUENCE DESCRIPTION:

GATCTAATCT NAGATGTAAC CATTCAAATT NACCCTGTAG ACTNGGGTGA CAAGTTTCGN 60  
TTGGTCATAG CTAGTACCTT GTATGANGAT GGTACCCCTGG ATGATGGTGA ATACAACCCC 120  
ACTNATGATA GGCCTTCCAG GGCTGACCAG TTTNAN 156

SEQ ID NO:4300

LENGTH:310

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05114

SEQUENCE DESCRIPTION:

GATCTTACCT TCATCCAGTC TAATAGGTTT GGAGAGTAAA CCTTNCTCA ACTTGTGCTG 60  
TTTATATAGC CAAGCTCCG TCAATAAGGC TTCATTGTGA CTTAAACAAA CATNATCTTC 120  
CCACATACCA GGAACATTG GACATTTATT TTACATGGGA AAAATTATTT GGAATAATAA 180  
AGCAGGNACT TTNCCTGANG TTGCAATTAA TACTGTATGG CTNCTNNTC ATGTTCATC 240  
TAGGTTTAN GAAGTGAAGT ATANGTAAAT NTNGGTCGT TAAATNGTGA TGGCGCTGGN 300  
NATTACATGN 310

SEQ ID NO:4301

LENGTH:231

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05115

SEQUENCE DESCRIPTION:

GATCACTCAA GCACAGGATT TTAAGACCAG CCTGGGCAAC ACAGTGAGTG AGACCCCTGTC 60  
TCTACAAAAA ATTAAAAAT TAGCTGGATA CTGTGGTGTG TGCCCTGTAGT CCCAGGTACT 120  
TGGGGCATG AGGCAAGAGG TTACTTTNAG CTCGGGTGTT TGAGGGCTATG ATGAACTATG 180  
ATTGTAGTGC TGTACTCCAG CCTGTGCAAA ANAGTAAAC CTTGTCTCAA A 231

SEQ ID NO:4302

LENGTH:52

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05116

SEQUENCE DESCRIPTION:

GATCGGGCCA CTGCACTCCA GCATGGGTGA AAAAGTGAGA CCCTACCTCA AA 52

SEQ ID NO:4303

LENGTH:419

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05117

01356

## SEQUENCE DESCRIPTION:

GATCACCAAC AGCCGTCCTC CCTGCGTCAT CCTGTGACTG CACAGGACTC TGGGTTCCCTG 60  
 CTCTGTTCTG GGGTCAAAC CTTGGTCTCC CTTTGGTCCT GCTGGGAGNT CCCCTGCCT 120  
 CTTTCCCCTA CTTAGCTCCT TAGCAAAGAG ACCCTGGCCT CCACTTGCC CTTTGGGTAC 180  
 AAAGAAGGAA TAGAAGATTG CGTGGCCTTG GGGGCAGGAG AGAGACACTC TCCATGAACA 240  
 CTTCTCCAGC CACCTCATAC CCCCTCCCA AGGGTAAGTG CCCACGAAAG CCCAGGTCCA 300  
 CTCTTNGNCT CGGGTAATAAC CTGTCTNGNT GCCCACAAGA TTTTATTTNA TTCTCCCCTT 360  
 AACCCNAGGG CAATGTCANN NTATTTGGCA GTAAAAGTGG GGGTTACAAA ANCCTAA 419

SEQ ID NO:4304

LENGTH:75

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05118

## SEQUENCE DESCRIPTION:

GATCTCCCTA GGGCCCCACC TGGACCATT TCCCTCCGTT TTATTTGTT AATTAATTC 60  
 TTTCAAATT GGAAA 75

SEQ ID NO:4305

LENGTH:171

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05119

## SEQUENCE DESCRIPTION:

GATCTCAGTT CACTGCAACC TCCGCCTCCN AGGTTCAGGT GATTCCNTG TCCCAGCTAC 60  
 TTGGGAGGCT GAGGCAGGAG AATCACATGA GCCTGGAGA TGGAGGTTGC AGTGAGCCGA 120  
 GATTGCACCA CTGCACCTCA GCCTGGCAA CGAGCAAACC TGNNCTCAA A 171

SEQ ID NO:4306

LENGTH:309

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05120

## SEQUENCE DESCRIPTION:

GATCCCTGGT GTGTTGTGTG GGCTCTTTA ACGTTGCCA CTGAGCCTTA ACCTCACTGT 60  
 ACTTCACTGT ACTTCACACG CATTGGTGT AACATTTAA TCTTAGAAGA CCCTGACCCA 120  
 CTGAGGGTTT GTGAGGAA TTGCTGAAGC CACGTTGAAA TCTGAAAC 180  
 CACAAGAAAG TACTTATAA AAGGTATCCT TATTTGAAGT GGATAAAATCT TGAACTCGA 240  
 AAAGTTGTGA TTTAGAAGAC AGGATTGTTT TTGAACATTA GGAATTAAAG GCTATATCTG 300  
 GTCTTAAA 309

SEQ ID NO:4307

LENGTH:587

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05121

## SEQUENCE DESCRIPTION:

GATCTAAAAA CTCATTTG GGGTAAAGAG TTAAGTGTCC AAAGGTTGTC ACAGTTCATG 60  
 AGGTCAGAGG GAGCTAGCCT GGCAACCTGGA CTCTGCCAT CCACAGCTGA CAGATCCAA 120  
 CAGAAGTGTAA TTAAATTCT CCAGTAGACA ATGCTGGTA AGGGAGGGGN TAGNNCTGGG 180  
 TTATTAAGAT ACAGGTGCT GTATTTACA TTGGTTGTGG GGGAAAGGGGA GCCTGGAGAA 240  
 AACAAAGTCA CTATCCCTT TTTGAAACA GGAAAAAAA TTATTTTG TTCAGTAAA 300  
 ATGGGTAGGN GAATTCCAAT GTCCCTAGCC ACAAGGGNCC AGTTTCACT GAGGAAGTGA 360  
 ACCAGTGGGG AACTCAAAT TTCCAGGNAA CATTGGGGGG GAGGGGGAAA ANTTGGGCTT 420  
 TTCNCNTAAA TTTGGCAGNT NTTNNCCAGT TGGGGNCNGG GNGGGGGCT CCTGTTTTT 480  
 TTTTTGGGG NTTGTGNTA NTGNTNNAT NGTACCGNT TATTTTGCG CCCGGGTTT 540  
 TTCTTGGGNT TTNTNAAGGG TNCCCCAAA NTTGGGTNA AACNTN 587

SEQ ID NO:4308

LENGTH:111

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05122

## SEQUENCE DESCRIPTION:

GATCCCCCCA TCTCTNCAGC ACTCTCTTGC TCCTCTCCCT TTTCATTCC TTACTTTGTA 60  
 TCTTNTCAGA TTAGAACATA TTTNNNTGT CATGACAAAG GACTCTCAA A 111

SEQ ID NO:4309

LENGTH:311

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05123

## SEQUENCE DESCRIPTION:

GATCTNAACT CCTTGGCTTC TTTACTTAGT TCAAGCCCCA GCCTAGGAAA GCCAGTTACA 60  
 TAAAAGTTGG CTCAGGAGTC TTAGAGCTTT ACCTAAATAT GAGCCCAGAA AACGGAGGAT 120  
 GGGGGTGGGG CGCCTCTG GAGGTGACAC TTGATGGGGG TGTGTTCTGG TTACTGTTCT 180  
 AAGGCTGTGC CATCAGCTCC TTCCCTCCCT GTTCATTCTG CATTCTCTAG TCAGTTGGCT 240  
 AAGAAGTGAC TCTTGCAACT AAAAATTAA AGAAATTACAC TTCCCCTCTA GGAGGTGATG 300  
 ATAGGGTTT N 311

SEQ ID NO:4310

LENGTH:366

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05124

## SEQUENCE DESCRIPTION:

GATCAGAGTT TCTGTGGAAT TCTGTTGTT AAATCAAATT AGCTGGTCTC TGAATTAAGG 60  
 GGGAGACGAC CTTCTCTAAG ANGAACAGGG TTCGCCAG TCCTCCTGCC TGGAGACAGT 120  
 TGATGTGTCAGCAGCTC TTACTTCTCC AGAACACACTC TTCAGTNAT AATAAGCTTA 180  
 ACTGATAAAC AGAATATNNA GAAAGGTGAG ACTTGGGCTT ACCATTGGGT TTAAATCATA 240

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GGGACCTAGG GCGAGGGTTC AGGGCTTCTN TGGAGCAGAT ATTGTCAAGT TCATGGCCTT 300  
AGGTAGCATG TATCTGGTCT TAACTCTGAT TGTAGCAAAA GTTCTGAGAG NAGCTGAGCC 360  
CTGTTN 366

SEQ ID NO:4311

LENGTH:240

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05127

SEQUENCE DESCRIPTION:

GATCACGGTG ACCTGGCAGC GGGATGGGA GGAACAGACC CNGGACACAG AGCTTGTGGA 60  
GACCAGGGCT GCAGGGGATG GAACCTTCCA GAAGTGGGCC GCTGTGGTGG TGCCTTCTGG 120  
AGAGGAACAG AGATACACAT GCCATGGTGC AGCACGAGGG GCTNCCCCAG CCCNTNATCC 180  
TGAGATGGGA GCAGTCTCCC CAGCCCCACCA TCCCCATCGT GGGCATCGTT GCTGGCCTN 240

SEQ ID NO:4312

LENGTH:96

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05128

SEQUENCE DESCRIPTION:

GATCTTTCT CCATCATGTA CTTAGTATTT CCCATTAACC TACACACTGA TTTTTNTGCT 60  
ACTCCTTGTA GAAACAAAAT TNTGGNTGGA CTCAGN 96

SEQ ID NO:4313

LENGTH:354

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05129

SEQUENCE DESCRIPTION:

GATCTGCTGG TCCTTGCAGG CAAAGCTACA GCCAGANTGT CCGTTTGANA CTCCTAGCTC 60  
ATCTGTCAACC GAGCTTNATC CGAATGTGCC ACGGAGCTTN CTCTCCACTT CCTCCGTGCA 120  
GCGGCCCTGC CACAGCCCTC CCTCGGCACA CTTTGACCCCT TTGTAGGGTT GGNATTAGCA 180  
GGACTCGGCT ATTTAAAGCA CCAGTCTGGG GTCGCCTGGG CCCCTGCTGA CCCNTCCTN 240  
CAGAGCAGCC AGCCCAGCCC GGGAAACAAGA CGGACTTNCT ATNCCTTCGG ACTCACAGCC 300  
TTTGAAGAGT CAAGCTNCAC TTNAAGCTCA CTCAGTAATA TCCTTCAAT GNGN 354

SEQ ID NO:4314

LENGTH:161

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05130

SEQUENCE DESCRIPTION:

GATCCGCCAC TTTCGGCCGG AGCTCGAGGA GCGGATGCAG CGGTTTGCCTT AGCAGCATCA 60  
GGCCCGGCAG GCTGCCTCTT AGCCCACAC CCTGGCCTGC TGTCCCTGCGT CTATCCATGT 120

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GGAATGCTGG ACAATAAAGC GAGTGCTGCC CACCCCTCCAA A 161

SEQ ID NO:4315

LENGTH:129

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05132

SEQUENCE DESCRIPTION:

GATCCTGGCT TTCCAGGGTG GGCAAGGGCA AGGAGCAGGC TTGGAGCCAG GGACCAGTGG 60  
GGGCTGTAGG GTAAGCCCCT GAGCCTGGGA CCTACATGTG GTTTCGTAA TAAAACATTT 120  
GTATTTAAA 129

SEQ ID NO:4316

LENGTH:227

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05133

SEQUENCE DESCRIPTION:

GATCTTTGAG GTGAACAAC TGCCTGTGGA ATCGTGGCAG TAACTGTTTC CACTCACAGC 60  
CTGAAATTCT CCTNTGTCCC AAACCCAGG GGGCCCCAGC AGCTTCGAAC CTACACCTGA 120.  
GGGCTACCAAG CAGGTGGCAGC TNTGGCTTG CACTGAAAA ACTGGGGACC AGCCCNCTTC 180  
TNCCACAAAT AAAGCCAAT AAAGCCTGAG AAGTGGAGAA AGCCAAA 227

SEQ ID NO:4317

LENGTH:154

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05134

SEQUENCE DESCRIPTION:

GATCTCCGTG GATGAACACTG GCCTGGACTC TTAGATTCA AAAATATTG AGGGTTTGG 60  
AGTNACAGAC CCTCCCCCTCT CCTCAGTGCA CTTTGGCATT TNACGGTGT CTTCCCCGGA 120  
CAGCACAGCA ATAAATNGNG TGATTGCGTG GAAA 154

SEQ ID NO:4318

LENGTH:181

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05135

SEQUENCE DESCRIPTION:

GATCAGGTTT GGNCTTCTCC CACTGAGCAT GACAAGCACT CGAAAGGCTA AATCAACAG 60  
AAACATCGAA ACAAAAGCTC AGTACGATGC CAACTNTAA GCCTGCAGGA NTCCCTCTGG 120  
GTTGTCCCCC CGGCACGNTC CACAGCTGGT NGACCCGGCA GTTCCTGGNT CCTTGTTCAG 180  
N 181

SEQ ID NO:4319

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LENGTH:315

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05136

SEQUENCE DESCRIPTION:

GATCTGCCCT TGNTNGCCTC ATACCTCTGT GCTCCACACT GCGGCCAGGC CAGCTGAGTC 60  
CCTCCATCCG TGGATGCTT CCTGCAGCTA TGTGGTATGG GGGTCATTCC TGCCTCTTGG 120  
CACCAAGGTG GGGGGCATGT GCTTGTGGG CACCAAAGTG ATGGAACCT CAGGTGCTCT 180  
CCGGGAGCCT GAACCTCCTG ACTGAGGAAC ATGGGCAGAA CATGTTTATT GCACAGAGTG 240  
GGCGCTGCAC ACAGGGGTGG CTGTACACGT GCTCTCAGCT CATCATCCTT TCCAGTAAC 300  
TTAAAAAAAC ATCCN 315

SEQ ID NO:4320

LENGTH:255

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05137

SEQUENCE DESCRIPTION:

GATCGGNNA CTTGGGGNGN GGCCCTAGGC ACTACCAGCA GCGCACGCTC ACCTTCGCC 60  
TCAGGGCTGA CGACCCCCCTG CTCAAGCTCT TGCAGGAGGC TCAGCAAAGC TGAATTAAC 120  
CAGGCAGAAG AGCACAGATG TGTGGGATTG GGGGAGGGAGT GGGGACAAGA TTTTNATCT 180  
CTAAGTGAAT TTCTAAAAA TGTATTTAT ACCGGCTTAT TCCTAGTATT GNATAAACTA 240  
GCGGGNTCAN TCAAA 255

SEQ ID NO:4321

LENGTH:212

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05138

SEQUENCE DESCRIPTION:

GATCAAACAT GCATGGNTGG GTCCCTCACGC AGACACACCC ACAGAAGGAC ACTAGCCTGT 60  
GCACGCGCGC GTCNATCTAC ACACACACAC AAGAGTTCAT AATGTGGTGA TGGCCCTAAG 120  
TTAAGCAAAA TGCTTCTGCA CACAAAACTC TCTGGTTAC TTCAAATTAA CTCTATTTAA 180  
ATAAAGTCTC TCTGACTTT TGTGTCTTCA AA 212

SEQ ID NO:4322

LENGTH:136

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05139

SEQUENCE DESCRIPTION:

GATCGAGTTA TTATGATAAC TGTGGTAATT TGTGGTATA AATAGCAGTA ACATAGGAAG 60  
GTTTGGTAA CTNCTGACAA GAAATTNAT GTAGAGAGTT AATTCGAGC ACATTAAT 120  
GACTGTCCCA CTCAAA 136

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SEQ ID NO:4323

LENGTH:228

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05140

SEQUENCE DESCRIPTION:

GATCTGCATT ATTCTNGGAN AGTATTCAAG TGGTATCTTG ACTATTAAAC TACGTATAGT 60  
GTTNNNTGNAA TAGAAAGAAA ACAGCATTGG AATTGGATTC ATGTATCGTG GGATACAGGT 120  
GTTATTCAG GTGATGTAATC TGCAATTATTT TCTTTAGCCA TAGTAACCTT TTGTACAAAT 180  
AACTAAGTAT TCAATTATAT ATAANGAGTG AAACATTAAC ATGGNAAA 228

SEQ ID NO:4324

LENGTH:297

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05141

SEQUENCE DESCRIPTION:

GATCCTGCCA CTGCACTCCA GGCTGGCAA CAGAGTGAGA CCATGTCTCA AAAAATAAAA 60  
ATAAAATAAA ATAATATCAG GNTGCATACA TCAGAGGCTG TTCCTAGTGT AAAGGCACCT 120  
TGGAGGGAGA AGACTTCAG AGTTAGGCAG ACCAACTAAG AGGTCAAGCTG ANGCACCTAA 180  
CCAGTTGTAAGGAGA GACAGCACCC CAAGANGAGA TGTGCAGGAN GGAGGAAAGA 240  
GGCTTGGTCA TAAAGGNTGG AGGAATTCCA AAGTGACACT GANACAGGCT GCGTTN 297

SEQ ID NO:4325

LENGTH:90

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05142

SEQUENCE DESCRIPTION:

GATCGTTCTG CTGAGTATGT TAAGCTCTT ATGACTGTTT TTGTAGTGGT ATAGAGTACT 60  
GCAGAAATACA GTAAGCTGCT CTATTGTAAA 90

SEQ ID NO:4326

LENGTH:411

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05143

SEQUENCE DESCRIPTION:

GATCTGCTGC TGCCATTAA ATCTTGCTCA TTAACCTTAC TCCTTGAGA ATTCTTAAC 60  
AATATTTAA ATTGGTAACA AAAATAGTTT AGCCATAATT GTTTAGCCAT GTGAGTTCA 120  
GGTTGGTACA CGTTCAAGACA GAACTGCTGT ATCACATTCC AATTTGAAT AGCCAGTGAG 180  
CAATCAAGTG TAGAGAAATG ATAAATGGCC TAAGAAGGCA TACAGTGCA TAAACGATGC 240  
TCTTCCTAGT AGCTTAATAG GCCACAAGCT AGTTCTGTT GCACTCTGAA ATAAAATATG 300  
CTTTAAAAAT GTAGGGANCA GTGCTTAGAA AAGCAAANC TAGGTGTGTC ATTGANATAA 360  
TAGGCATAAN ACTTAAATGT TCCATAGGCC ACTATTTGGA AGGGGGCCTT N 411

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SEQ ID NO:4327

LENGTH:99

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05144

SEQUENCE DESCRIPTION:

GATCTACACA TTTTATAGT CATTAAAT TGTATGACTC TGTCAAATNA TTTAAGTAAT 60  
TTGGTGGAT TTTAAAAAT AAAAAAATAA AAATAGAAA 99

SEQ ID NO:4328

LENGTH:80

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05145

SEQUENCE DESCRIPTION:

GATCAGTTT TATAGCATCT ATGGACATAG AAAATCAGTC ACTGAAAAAA ATAAACACAG 60  
CTTCAATGT CTCACTCAA 80

SEQ ID NO:4329

LENGTH:263

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05147

SEQUENCE DESCRIPTION:

GATCCAGAACAT CACCAAGACC TCCAGCCCTG GATGATGCCT TTTCCATCCT GGACTTATT 60  
CTGGGACGTT GGTTCCGGTC CCGGTAGCCT TGTTAACCT CAGAGGCCCT CAAGTCCTTT 120  
CCACCTNTCA CCCATTGCC ACCATTAANA AGCTTAGCTG NNTCTTGCCA CCTCAGGGGC 180  
TTGGATATGT GGAATAGTGA ACTGGGNCCA TGTCAGTTG TCACTNACCC AAACTGACCA 240  
ATAAAACCTN NATTTATGNT AAA 263

SEQ ID NO:4330

LENGTH:111

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05148

SEQUENCE DESCRIPTION:

GATCCTAANN CTGACAAGAT TCAAAGNACT AAATTAATT CAGTCATNA CACTACCAAT 60  
TACCGTTAT NGGTAGACAT CTTGGAAAT TTCCACAAGA GCAAGCTAGG N 111

SEQ ID NO:4331

LENGTH:264

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05149

01363

2153480

SEQUENCE DESCRIPTION:

GATCTGACCT GTTTATTGTT GGCGCTTGTT GAAAACGAGC TTTCTTCCC ATGATAGTGC 60  
TTCGTTTTG AAGTGTGAA GCTGTGCTCC CCTNAAATCG TGGCAGGAGA GATTAAGGTA 120  
ATTACAACAC TCAGTTCTAT GTCTTACAAG CACTTTGTCT TGTCTCTGCA AGAAAATTG 180  
ATNCCNGTCA TNTCCCATAA AATACAGNCA TTTTACCCANC ATANTATGCT TTGATTGANG 240  
CAGCANTATG CTTTGGGCA GTAN 264

SEQ ID NO:4332

LENGTH:259

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05150

SEQUENCE DESCRIPTION:

GATCCTCCCG CCTCAGCCTC CCAAGTAGCT GGNATTATAG GTGTGTGCCA CTGTGCCAAG 60  
CTAATTTTT AATTTTNGT AGAGATGNGA TTTNACCATG TNACTCAGGC TGGTCTCAA 120  
CTCCCAGCCT CAAGCNATGC TCCCACCTCC ACCTCCCAA GTGCTGGGAT TACAGGCGTG 180  
AGCACCATAAC CTGGCGCATG CATATTTTN AAGAGTACCC ACTGGNGTCT AATATATAGC 240  
CTGGGNTACC TGGGATGAN 259

SEQ ID NO:4333

LENGTH:250

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05151

SEQUENCE DESCRIPTION:

GATCTAACCA ATTGAATAT GACTTCCTAC TCCAACGTAT CACCAAAACA CTGAAAAGCA 60  
ATAGCTGGTT TGGTTGTTAG AAATGGGTGA ATTAATGGTT TTNGTTAGTT CACTTCAGCT 120  
TAATAAGTAT TTATNGCATA TTTGCTATGT CCTCAGTGTAA CCACTACTTA GAGATATGTA 180  
TCATAAAAAT AAAATCTGTA AACCATAGGT AATGATTATA TAAAATACAT AATATTTTC 240  
AATTTGAAA 250

SEQ ID NO:4334

LENGTH:260

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05152

SEQUENCE DESCRIPTION:

GATCGCATT ATATAACATT CTTGAGGTGA CAAAATTATT GAAATGAAGA ACAGATTAAT 60  
GGTTGCCAGG GATAGGGACT GGAGGGGGTG TGGGGTATGT ATGACTATAA AGGGATGACG 120  
CAAGGAGTTC CTTTGTGCTG ATGGAACAGT TCTATATGAT TATGATGATT ACGATGTTGA 180  
TTATAACATT TGATTATGAG GTTAAGCACA TGAGTCTTTA CCTGTNCTGA AGTTGTATGG 240  
ACCTACATAC ACACAAATGN 260

SEQ ID NO:4335

LENGTH:261

01364

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05153

SEQUENCE DESCRIPTION:

GATCAAGACG AGCTGCACC GCCTGAAGCC CGACACGGTG CCAGGCCCT GCTGCGTGCC 60  
CGCCAGCTAC AATCCCATGG TGCTCATTCA AAAGACCGAC ACCGGGGTGT CGCTCCAGAC 120  
CTATGATGAC TTGTTAGCCA AAGACTGCCA CTGCATATGA GCAGTCCTGG TCCTTCCACT 180  
GTGCACCTGC CGGGGGGAGG CGACCTCAGT TGTCCCTGCC TGTGGAATGG GCTCAAGGTT 240  
CCTGAGACAC CCGATTNCTG N 261

SEQ ID NO:4336

LENGTH:145

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05155

SEQUENCE DESCRIPTION:

GATCCTCAGT AAACCTGAG AAATAATGAA TGTTGGTTGT TTTAAAATGG TAAATNTTGA 60  
GGTATTATGT TATGTGGCAA TAGATAGCTA ATATATAACT NATTTGANTC AAACAATATG 120  
TTAACNTAAA GCNCAGAAGA NTAAA 145

SEQ ID NO:4337

LENGTH:264

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05157

SEQUENCE DESCRIPTION:

GATCTAAGGA AAGAAATGGA GCAACTAGTG CTTGACAAAA AGCAAGAGGA GACAGCCGTA 60  
CTGGAAAGAGG ATTCTGCAGA TTGGGAAAAA GAACTGCAGC AGGAACTTCA AGAATATGAA 120  
GTGGTGACAG AATCTGAAAA ACGAGATGNN AACTGGGATA AGGAAATAGA GAAAATGCTT 180  
CAAGAGGAAA ATTAGCTGTT CCTGAAATAG AAGAATAATC CTTAACAGTC TGCAAACGTGA 240  
CATTAAATTC TAGATGTTGA CAAA 264

SEQ ID NO:4338

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05158

SEQUENCE DESCRIPTION:

GATCGGGGCG GGGAAACAGC NGGAAGANGG NCACACCCGG TCTGACTACA ACANCCAGAA 60  
AGAGTCCACT CGGCACGTGG TCCNGCGCGT GAGGGGGGGT GTCTAAGTN 109

SEQ ID NO:4339

LENGTH:195

TYPE:nucleic acid

TOPOLOGY:linear

01365

2153480

CLONE:HUMGS05159

SEQUENCE DESCRIPTION:

GATCAGTATA CAGTGTACGT AACTACACC ATCCTCAAAC CCCGGAAAGC AAAGCAAATC 60  
AGGAAGAAAA GTGGAGGTTA GCAACACACC TNTGGCCCCA AAGNACAACC ATCTTGTAA 120  
CTATTGATTC CAGTGACCTG ACTCCCTGCA AGTCATCGNC TGTAACATTT GTAATAAAGG 180  
TCTTCTGNCA TGAAA 195

SEQ ID NO:4340

LENGTH:54

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05160

SEQUENCE DESCRIPTION:

GATCTAATAT TCAGGAATTT TTCTCCTAAA GACACCCAGT AAAAATATCA CAAA 54

SEQ ID NO:4341

LENGTH:89

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05161

SEQUENCE DESCRIPTION:

GATCACTGTG TAAAACTAAG TNTCTCTAAA TGTAATGCAT CGATTTAGTG TCTGGAACAT 60  
AATAAAATATT TGCTCTCATG ATTGCTAAA 89

SEQ ID NO:4342

LENGTH:89

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05162

SEQUENCE DESCRIPTION:

GATCTACATC CCCATCCACC TATACGGACA TCTTTCCGT TGTGGTTGA GAATGTCCT 60  
ATAATAAACC CCTCTGCTTT GTTCTTAAA 89

SEQ ID NO:4343

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05163

SEQUENCE DESCRIPTION:

GATCGTCTTG TATGGTGAAT TTTCTAGGAG CGATGATGTA CTGTAATTT ATTTAATGT 60  
ATTNNNGATTN ATGATTATNT ATTAGTTGNN TTTAAATGCT TN 102

SEQ ID NO:4344

LENGTH:248

TYPE:nucleic acid

01366

2153480

TOPOLOGY:linear

CLONE:HUMGS05164

SEQUENCE DESCRIPTION:

GATCAATTNT GCANCANACA NCAATCTAA CCATTTCCAG AAACTACTAG TTATATTAGG 60  
CACGTTTAA AAACTTAAAC AAAATAAAGG CCATCCAAA CCTGGGCTG TTGTGGGTT 120  
ATTTTGCAGC AGGGTTGTGT TCAAAANCTT CCTTTGACTC CCTGAGACTT TATCTNCTNC 180  
TTGCAGAGTA AGATGGAAAG CCANTCAGTG TTGCGNTAA TGTAATACAG NGTAGTGCCA 240  
TTCNGGN 248

SEQ ID NO:4345

LENGTH:239

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05165

SEQUENCE DESCRIPTION:

GATCCAAACT TCTACAGCAA AAACTTACTT CTTTTAGGAA AGACATACTT GAAACTACAC 60  
AACAAAAAGC TTGCTGCTT CTGGCTAATG AAAGCCAAGG ACTATCCAGC ACACACAGAG 120  
GAGGATAAAAC AGATACAGAC AGAAGCTGCT CAGTTGCTTA CAAGTTTCAG TGAGAAGANT 180  
TGAGAACTTT TCAGAGAAGA TTTATGAAAT AGCTAATAAA CATTGCCTT TCTTTAAA 239

SEQ ID NO:4346

LENGTH:223

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05166

SEQUENCE DESCRIPTION:

GATCAAAAAA TGCTCCGCT CAGGGATTAA TGGTGGATTA TTGCAGACAN TGCTAAAAAT 60  
ATAGAGCACA AGACAAGTTT ACTAAATTAA AATTTTATT TTTGAGAAAC TGTTATTGT 120  
ATAAATTATC AAGATTGTA GGCTTCCTT TNGTAGAAAT AATTGTTTA TGTGCCAGAG 180  
AATTCAATT TNGTTTCAA CAATAAAGCA TTGATAAGAG AAA 223

SEQ ID NO:4347

LENGTH:52

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05168

SEQUENCE DESCRIPTION:

GATCATTGT TTATTAAT GTGTCTATT ACACAGTGAG TTAACTCTCA AA 52

SEQ ID NO:4348

LENGTH:334

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05169

SEQUENCE DESCRIPTION:

01367

2153480

GATCCGAGCG ACCATGGTGG CCCGGGTGTG GTCGCTGATG AGGTTCTCA TNAAGGGAAG 60  
TGTGGCTGGG GGCGCCGTCT ACCTGGTGTG CGACCAGGAG CTGCTGGGC CCAGCGACAA 120  
GAGCCAGGCA GCCCTACAGA AGGCTGGGA GGTGGTCCC CCNGCCATGT ACCAGTTCA 180  
CCAGTACGTG TGTCAGCAGA CAGGCCTGCA GATACCCCAG CTCCCAGCCC CTNCAAAGAT 240  
TTTACTTTC NATCCGTGAC TCCTGGAATG CAGGNATCAT GGACGGTTGA TGTCAGNTCT 300  
NNTNNGTGGC CCCTTCAAA GGGNCNGGTG AGTN 334

SEQ ID NO:4349

LENGTH:146

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05170

SEQUENCE DESCRIPTION:

GATCCATCAA ATTGAACAAT CTGTTGTAAT TTAAAATTTT GGCCACTTTT TTCAGATT 60  
ACATCATTCT TGCTGAACCT CAACTTGAAA TTGTTTTTT TTNCTTTTG GATGTGAAGG 120  
TGANCATTCC TGATNNNGGC CTCNNN 146

SEQ ID NO:4350

LENGTH:257

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05172

SEQUENCE DESCRIPTION:

GATCTCAAGC CTCTCTGAA CCCCAGGCTT TCTTGAGTCT CCATATGAGC ATTTGCCTCT 60  
GTGGGCACAA CTTCAAGTGT CCTTTGTGAG GAAATGTGCA TCTCTGGNTG GTGAACCTCC 120  
ATCCCTCAGA GAGAAATAGA AGCACAAATT TGAAACAAGC TGTCTGTCTG NGNNNNNNCT 180  
TTATGTCTG GAAACTTTAT TTATCCATCC AAGCTTTNTT TTTTTTTAG CCTTTNNGGG 240  
CAGGNAACCA TCCAGGN 257

SEQ ID NO:4351

LENGTH:73

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05173

SEQUENCE DESCRIPTION:

GATCTGTCTA CTGAGAAGAC CCAAATCTTGT GTTTCTAAAT GCCATTCTC AATAAAAGGA 60  
ATTGGGTTTC AAA 73

SEQ ID NO:4352

LENGTH:73

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05174

SEQUENCE DESCRIPTION:

GATCTCCTTC TCCNTCCTGT CCTGTCTTGT CCCCTCAGGA CTGCTGGAAA ATAAATCCTT 60

01368

2153480

TAAAATAGTG AAA

73

SEQ ID NO:4353

LENGTH:306

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05176

SEQUENCE DESCRIPTION:

GATCCAAGCA GGGGGATGAA AAACTCAGCA GAGAAATTG AGACCATTG CCAAGACTNT 60  
CCCCCTCTCC TCAGGACCCC CTGGCTCAGT NCTTGAAAAA CGGTGTCATA TTTAGTCAGA 120  
GGCCCCACCC CCAGGAAGCA TGGATGGGGA TGAAGGCACA GGCCTCTCCA ACCTCAGAGG 180  
CCCTTGTTGG GGTCAGGACA CAGAGTGGGN AGANGAGACT GATGCAGGCC TACCAGTNCC 240  
TGGCTTTTG TCTGGGGCTG GAATAAAGAG GTGNCTTCAG CTGTTGGNN CGAGAGGCAG 300  
GGTAAA 306

SEQ ID NO:4354

LENGTH:76

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05177

SEQUENCE DESCRIPTION:

GATCAACTGG AACCTCTGTA TCATGCGGCT GAATTCCCTT TTTCCTTAC TCAATAAAAG 60  
CTACATCAGA CTGAAA 76

SEQ ID NO:4355

LENGTH:52

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05178

SEQUENCE DESCRIPTION:

GATCAGGCTT TTAGGACCTA GGAAACAAAT AAAGAGGAAT TTGTTGCTGA AA 52

SEQ ID NO:4356

LENGTH:268

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05180

SEQUENCE DESCRIPTION:

GATCCTTATT CTAGCTACAA GTCAAAGATA ACTCCTGGTC CAGACAAAC ACCTGGCCTA 60  
TCACAAGCTG ACTAAAAATC TGCACTTGG GCCAGCGCAG GCAACAGTAA CTNTGACAGG 120  
TTCAAATTAG ACCTCACACT TTCTACTCAT ATTCTAGTCA CTGGACCCAT CTGANTCAGT 180  
AATCCCTNCT GCCCGGTCTT GGAGTAACCT CTTAGAGATA TTATAGCAAG TGGCAAAANT 240  
AAAAGAGGGA TTTGCTANGA NTATCAAA 268

SEQ ID NO:4357

01369

2153480

LENGTH:114

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05181

SEQUENCE DESCRIPTION:

GATCTAAAT ATAAATTGA GATTATACAT GTAGTTATGT ATAGNGNCAT GTAGTTACAC 60  
ATAGTTTGT ATTNCCCTGT TTTTTCTCA TATGAGCATT TNCTTATTAA NGTN 114

SEQ ID NO:4358

LENGTH:179

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05182

SEQUENCE DESCRIPTION:

GATCTACACG TGTTGTTTG TTTTNCTTT ATTGATGCAC GNATGCTTT GAACAGTAGA 60  
GNGAAATGCT AGACATGGAG AATCTGCTCT GTTGTCCCTN TATACATTTC TGTAGTTAAC 120  
AGAACACTGT AATGTGCCCT GGAGCTTAGT AACTNGTAAT AAATTCAATN GATATTAAC 179

SEQ ID NO:4359

LENGTH:85

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05183

SEQUENCE DESCRIPTION:

GATCCTAAAT CCTATGTAGG CTNNGGTTAT TAGTGTATAT TTGTGTCTTA AAACAATTT 60  
GAAAGTNAAA AAAATATTT TTAAA 85

SEQ ID NO:4360

LENGTH:194

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05184

SEQUENCE DESCRIPTION:

GATCTNATT TGAGATAAA AAAAATACCTT CTAGCTTAG CCAGGTGTGC ATGTNGCTGC 60  
CATTTGCAT TTTTGAATCA TCTTGTGAA TTGTCACCAT GAAAGTGTAA CTCAGAATNG 120  
TCATAGATT NNTNTTCTTT GTGCAAAAAC ATGGAAAATT GTCACTGACT TTGTTTGAG 180  
GTTTCCCCGG NNNN 194

SEQ ID NO:4361

LENGTH:216

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05185

SEQUENCE DESCRIPTION:

GATCTGCTGT ATGTTACAGT TATGTAATT GACTTGTTC AAAATTATTA AAGTTTAAG 60

01370

TGTATGCATT CTACTGGTCA ATAAGTAAAT ATATTCAGGC TCTGAATGTA GACAGATAAA 120  
 TATATAAATA TAGAAAGTAC ATTGTAGA ATACAAACAA GAATAAAAAT TGAGTACAGA 180  
 NTGAAAACCT TATTAATTT TATCACTCCA TATAAA 216

SEQ ID NO:4362

LENGTH:333

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05186

SEQUENCE DESCRIPTION:

GATCAAACTC AAGCTCACAC CTGTACCTGA TGGGAATGAA CATAATGTGA AGAAACTTAT 60  
 TTCCCAGTGT AAACCGAGTT GTACAGAAAA AAAATGTTT GGGTATAAAAT CTGGGTTTC 120  
 AAAACCAGCT TTNTTCTATA TATAAATNAT GCTGCTATTAA CAGATTTAAC ATTNCTGTT 180  
 AAAGGAAAGT CTACATTTTC TGCGTGTNCAGAATGTTTA ATAGCAGTNN CTCTTGAGTG 240  
 TATTTNCCTT GGTATGTTT TNAACCTATT TCCCTTNAAG CCGAAAATAT TGCCAATTGG 300  
 ATANGTTAG CCTTANNAAG TNNAATAAAN NAN 333

SEQ ID NO:4363

LENGTH:185

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05187

SEQUENCE DESCRIPTION:

GATCAGCCAG TCTCTTCAT CATCAAGCAG ACATACTCAA GGTACCAACA CAGCAAAGGC 60  
 ACAAAATGTC TCTATATCAG TATTTTCAT GGTATATGTG AGACCCATTA GTGAGGCATG 120  
 AAATCAATTC TGTGAGTCAC AATGAACATT TGTCTAAAAA ACATAATAAA NTGTAAAATA 180  
 CCAAA 185

SEQ ID NO:4364

LENGTH:108

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05188

SEQUENCE DESCRIPTION:

GATCCTTCC CATTATTCT GGGAAAGATGT TTTTCAAACACT CAGAGACAAG GACTTTGGTT 60  
 TTTNTAAGAC AACGATGAT ATGAAGGCCT TTTGTAAGAA AAAATAAA 108

SEQ ID NO:4365

LENGTH:201

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05190

SEQUENCE DESCRIPTION:

GATCATTGG CTCTTTTTT CCTTCAGAA GAGTNGCATC AACAAAGTAA ATTGTATTA 60  
 TGTATGTAAA TAGATTNAA NCTTCATTAT AAAATATTGT GAATGCCTAT AACTTGTNN 120

2153480

NCAATGTGNT TGTGTGTGTT TCTAAGGACT TTTTCTTNGG NTTGCTAAAT ACTGTAGGGT 180  
TGAAAATGCT TCTTCCTACT N 201

SEQ ID NO:4366

LENGTH:118

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05191

SEQUENCE DESCRIPTION:

GATCCTTCAT GGACANTATT CTAAGTATA CGTAGACACT TACTTGAAA TTTTGGACA 60  
TTATATTAAGA TGAGTGCTAT CTGTGAAATT GGTTATATTA GGTGGCTNNN NCTAATGN 118

SEQ ID NO:4367

LENGTH:277

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05192

SEQUENCE DESCRIPTION:

GATCTGAGGT CTCAAGCTAG GAGAGACTGA GAATTTAAT CAGTTGGC ATATAGTTG 60  
GACTGAATCA CATCTGTAGT ACTTAGCCAA AGACAATTG GAGGAGAATA TCAGCCTTCT 120  
GGAAGTAGCT ACTTCTTGNT CAATGAAAG TGTCGCAGAT ATTCAATAAA ATGGCAACCT 180  
GTTATAATTT TTTGAAATAT CAGCCTCTG GNAGTAGCNA CTTCCTGTAN CAAANGTAAA 240  
GNGTCGCAGN TATTCAATAA AATGGCAACC TGTTTN 277

SEQ ID NO:4368

LENGTH:209

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05194

SEQUENCE DESCRIPTION:

GATCTCTTGA CAANTGTGTA TGTTAACCTT TTGACACATG TTTTGTACTT AGTACACGAG 60  
AAAACCCAGC TTTCATCTTT TGTCTGTATG AGGTCAATAT TGATGTCACT GAATTAATTA 120  
CAGTGTCTTA TAGAAAATGC CATTAAATAA TTATATGAAC TACTATACAT TATGTATATT 180  
AATTAAAACA TCTTAATCCA GAAATCAA 209

SEQ ID NO:4369

LENGTH:58

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05195

SEQUENCE DESCRIPTION:

GATCGTGTG GAGACTNTNA CACAGTTAA ACACATCAAT AAATACTTTA ACTTCAA 58

SEQ ID NO:4370

LENGTH:108

01372

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05196

SEQUENCE DESCRIPTION:

GATCGAGGTA GTAAAGGCCA TCCACATTT AAAGGGTTAT TTGTCTNTNN TATAATNCGT 60  
TTGCTTCAG AAAATGTTT AGGGTAAATN CATAAGACTA TGCAATAN 108

SEQ ID NO:4371

LENGTH:190

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05197

SEQUENCE DESCRIPTION:

GATCAAACAG GGACACAAAA GCAAGTATCA TGGGAGGAAC TTGAAATCTC TGNGGACAGC 60  
AGAACGCTGAC TTCAACTCTN ATAATTGTGG CATCCATAAA TTGCAAATAT AGCCCTGAAT 120  
AGATACACAC AAATGCTAT AATGAAGGCC CAGCAGAATG GAATGTGTGA CCATCTTCAG 180  
GAAGAAAATN 190

SEQ ID NO:4372

LENGTH:241

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05198

SEQUENCE DESCRIPTION:

GATCAATCCC TAGTAAAAGC CCTGGACACC TAGGCATGGG TGAGCTACTN TGGTTGGTAA 60  
TACTCTGTGC ACACATCATT GTAGCCACAC ATCATTGCTG GGAGAAATTA GCATTATCCT 120  
GAAGACTCTG CCAGGAGAGG ATAATTGGAA GTTCTCTGG ACCTTACCTT ATGTGCCCTT 180  
NTTCATTGCT GATTTAACG TGTATCCTTT CACTGTAATA AACTGTAACT ATGNGTGCAA 240  
A 241

SEQ ID NO:4373

LENGTH:51

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05199

SEQUENCE DESCRIPTION:

GATCGTTCAT TGCCTTCCA GGGTTATTA GTAAAGTTG TTGAAAACAA A 51

SEQ ID NO:4374

LENGTH:153

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05200

SEQUENCE DESCRIPTION:

GATCTCAGGT GATTACCCG CTTCTGCCTC CCAAAGTGCT AGGATTACAG ACATGAGCCA 60

01373

CCGCACCTGG CCATACAATT GCCTTCTATA TGTTTTNAT TTAATATGAC ATTTGTATT 120  
 CCCCCATGTTA TTAAAAAATT CTNTATAAGC AAA 153

SEQ ID NO:4375

LENGTH:103

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05201

SEQUENCE DESCRIPTION:

GATCACCCCA CCCTGTGAAG AGGCAGTTGG TGCTGGCAGT AAGCTGGTTT CCTCCTCTCC 60  
 AGGGTTTTCC TAGTAATAAA GGTGTTNCTG TTGANGCCGT AAA 103

SEQ ID NO:4376

LENGTH:390

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05203

SEQUENCE DESCRIPTION:

GATCACATTC ATTCCATAGG TAGCTTACG TGTGGCTACA ACAAAATTAA CTAGCTTTTT 60  
 CATTGTCTTT CCATGAAACG ANNTGANGAA AATGATTTTC CCTTTGCAGG TTGCACACAG 120  
 TTTTGTTTAT GCATTTCCCTT AAANTTAATT GTAGTCTCNA GGATACAAAC CATAGTAGGC 180  
 AATAACAATT TAGAATGTAAT TATATAGGG TATATTTAGC CTCTTTAGA AGTCAGTGGA 240  
 TTGAATGTCT TNTTATTTA NNTTTACAT TCATTAAGGT GCCTCGTTT TGACTTGTC 300  
 CATTAACATT TATCCATATG CCTTGCAAT ANCTAGNTG GTGNAAAGCT AACCAAGTGT 360  
 TGTAACCANT AATCCNTTGT TTNGNGGTGN 390

SEQ ID NO:4377

LENGTH:144

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05204

SEQUENCE DESCRIPTION:

GATCACATGC AGGACTCTTT CTTAACATGCAG CCTGAGACAA ATCTTGCAAT ATGAAGAGAT 60  
 GATTTCAGG TTTIATTGAA TAAATGAATT GTAATTTTA CTTGAAATTAA TCTTATTAG 120  
 TATAATAAT ATTACAATAT TAAA 144

SEQ ID NO:4378

LENGTH:386

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05205

SEQUENCE DESCRIPTION:

GATCCCACAG CGAAACACTG GCCACTGGCT ACCAGTATTN CTTCCCAGAG CTAGGGCTG 60  
 CCTTAAAGGA AATTGTAGCC TAAGTAGGTC GTGGCAAGGG CCTGAGGCCT GTTCCTCACA 120  
 GGCTTCCAGG TTAGGCACTG TGAATAGGCT CAGCTCCTCT AGAGAGCTGA AGCCATCTGG 180

2153480

TTCTTAGATT CCTCTCCCAG TCCTCTTCC CATTGTTCTG TTGCTCCACC TTATTGTCTC 240  
AAGGCCGTA A TCTCATCAGG TTGGGACATT AATCTTTCA ACTCCTTGAAAGATTCC 300  
CAGTTGGTT TCTCTACATG TNCTGCAGCT GGCCNCAATT CTCCCTTNAC GTTGTGTAGA 360  
GAATGNTCTG CAGTTTAGG GCAAGN 386

SEQ ID NO:4379

LENGTH:174

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05206

SEQUENCE DESCRIPTION:

GATCTAAACG AAAAATAGTT TCTTGTAA ATTACACATAA GGCAATNAGA TATGGAAAGA 60  
TGACAAGATA CGTATAAACAA TTGGTTGCA TTTTATTAAA TNATTCTAAT GCAAATCTG 120  
TATAAAGAAC CCATGATGTT TTGTAACCTT CTAATTAAAA TGTCAAAT GAAA 174

SEQ ID NO:4380

LENGTH:207

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05207

SEQUENCE DESCRIPTION:

GATCTTGGTC AATAACTGGG AGATGGACAA ACTAGAGATG GAAGATGCAG TCACATTTT 60  
GAAGACTAAA ATCTATTCAG TAGAAGCTCT TCCTGTTGCT GCTGTAATG TGCAAAGCAC 120  
ACAATAAAAGT GAAAATCAAC CTTTCATAT TAGGAGACAT GCATTTGAA AAATTAATAA 180  
AGATGACAAG TCAGTTGTCA ATGGAAA 207

SEQ ID NO:4381

LENGTH:189

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05208

SEQUENCE DESCRIPTION:

GATCAGCACCC TTGGCCGTGA TTCCCAAGGT CCCAGCCAAA GCAAAGGGCC AGTTGTTCA 60  
GTTAAACAG ACATGCTTT AGCTAATAA ATTAGTTAA CTGCCAGTAA AGTTATTGT 120  
TAGCTTGNT GAAAGCTATG NNGGTATCTT TCCCTAATCA TCAAAGTAA TAAAANTCA 180  
TTTCTNAAA 189

SEQ ID NO:4382

LENGTH:502

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05209

SEQUENCE DESCRIPTION:

GATCTGTTCT TTTAAGTTG ATTGGGAGT GGCATTCTT TATAACCCAAA GACTGTAGTG 60  
CATCTTGAAG AGCTCAAAGC ACATGACCGC ACAAATGCTT ACAGGGTTTC CTCCCCAGTA 120

01375

2153480

ATCCAATCTC ACTCCCCTG TAAGGGAATT CTGGGGCAGC TATGGTTGA GTATGCAGTT 180  
TGCATCGTGT TTCTACCTT AGTACCTTGC CACTCTTTA AAACGCTGCT GTCATTCCTC 240  
ATTTCTTAGT ACTAATGATT CTTGATTCT CCCTCTATT TGCTTAATT CACTTCCTT 300  
NCCTAAATT GGTGATTGG CATATCAAAT TCTGGTAAAA TNGTTTNNG TAAANCATAT 360  
TTACCCNAC TTGGGTAAA TCCCAATTCC TGGNTAGGGN CTTTAAAAA NGGGTTTTN 420  
NTTAATNGGG NNAATCCAAT TATTAANAN GGGGGNCCN TTTTTNAAG GGNGGAANAA 480  
ANGGNGAGGG GGNAGNTNGN GN 502

SEQ ID NO:4383

LENGTH:383

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05210

SEQUENCE DESCRIPTION:

GATCTCTGGT CAGAGTGAAC TCTTGCTTCC TGTATTCAAG CAGCTCANAG CAGAAAGTAA 60  
GGGGCAGAGT CATACTGTG GCCAGGAAGT AGCCAGGGTG AAGAGAGACT CGGTGCGGGC 120  
AGGGAGAATG CCTGGGGGTC CCTCACCTGG CTAGGGAGAT ACCGAAGCCT ACTGTGGTAC 180  
TNAAGACTTC TGGGTCTTN CCTCTGCTA ACCCAGGGAG GGTCTAAGA GGAAGGTGAC 240  
TTCTCTCTGT TTGTCTTAAG TTGCACTGGG GGATTTCTGA CTTGAGGCC ATCTNTCCAG 300  
CCAGCCACTG CCTTCTTGT AATATTAAGT GCCTTGAGCT GGAATGGGA AGGGGNCAA 360  
GGGTCACTCT NTCGGGGTNG GNN 383

SEQ ID NO:4384

LENGTH:258

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05211

SEQUENCE DESCRIPTION:

GATCAAACGT TTGGAGGAGA AGCTGAAGGA GGCTGAGACC CGAGCAGAGT TTGCCGAGAG 60  
GTCTGTGGCA AAGTTGGAGA AANCCATCGA TGACCTAGAA GAGACCTTGG CCAGTGCCAA 120  
GGAGGAGAAC GTCGAGATTG ACCAGACCTT GGACCAGACC CTGCTGGAAC TCAACAACCT 180  
GTGAGGGCCA GCCCCACCCCC CAGCCAGGCT ATGGTTGCCA CCCCAACCCA ATAAAACGN 240  
TGTTACTAGN CTNTNAAA 258

SEQ ID NO:4385

LENGTH:174

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05212

SEQUENCE DESCRIPTION:

GATCAATGAA AGGAGACATC TGGAGTGTGC GTGCTTCTC AGAGGGACGG GTGATGGCA 60  
GATTGGAAAA AGCACCGCAG ATGGGAACCT TAATCTTCT TTTCTAAAT TGATGCTATG 120  
AAAATTTGCG TTTCTGTAA CTTGTAAAAA CTAAGTTG CTTGTCTACT GAAA 174

SEQ ID NO:4386

01376

2153480

LENGTH:62

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05213

SEQUENCE DESCRIPTION:

GATCAGGCAA AAATAGTTT CCAAAGTTAT TTTTAATAAA GTATATACAA AATTCTTATA 60  
AA 62

SEQ ID NO:4387

LENGTH:217

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05214

SEQUENCE DESCRIPTION:

GATCTAACGC CACACCTCCG TGAAAACACA ANTNCACAG CAGGAACCAC NTGAACCTGG 60  
ACATCAGCAG TTTATTCAGC AGATGCTTCA GGCTCTNCT GGAGTAAATC CTCAGCTACA 120  
GANTCCAGAN GTCAGATTTC AGCAACAACT GGAACAACTC AGTGCAATGG GATTTNGAN 180  
CCGNGAAGCA AACTTGCAAG CTCTAATAGC ANCAGGN 217

SEQ ID NO:4388

LENGTH:95

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05215

SEQUENCE DESCRIPTION:

GATCTATGCA GACAACGTG TATTCTGTTT TATAACAGTT TGTTGAATT TACTTACAGT 60  
TAAAAAATTT AAATATATTT ATGTTGTAC GGAAA 95

SEQ ID NO:4389

LENGTH:192

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05216

SEQUENCE DESCRIPTION:

GATCTGGGTG AAGGGGAGAA CCTGCCATCT TATCCCTACC CCCCCGGGGC CCTCAAGCTT 60  
ATTTTCTTGT TGAAGAACAA CAAAACCTC GAGATTCATG TACTGTATGT TGGAGAAAAAA 120  
AAATTACCTA ACTGTTCCCC CAAAAAAAGTC AGTATNTTT GTACTTTGTA AAAGTGTNGG 180  
TTAAAAATGA AA 192

SEQ ID NO:4390

LENGTH:135

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05217

SEQUENCE DESCRIPTION:

01377

2153480

GATCTGCAGC CTTTGGTA TCAAATGGGT CAAAACCATG GGACCTGCCA CCTCCCATCA 60  
GCAATTCTGG AAATGCACTA TTTCTACTGG TGNTCTTGCT TTTTTTTT TTNNATTTC 120  
TNGNTGAANT GCCAN 135

SEQ ID NO:4391

LENGTH:270

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05218

SEQUENCE DESCRIPTION:

GATCGTANTT AGTCCTTTTC ATCTCAGCTG CTCCCTAAAT CAGTGCAACC CCTCCAAATT 60  
AATGTGAATT GAAACTTGCA TTGCTTTCA ACTTAATTGA ATACTTACTA TATGTGAACC 120  
ACTGCACAAA ATAGGGAAAG AAGATGTGGG AGACAAAGAT GTGGAGCCTG TCTTCATAA 180  
ATTTACAGTT AGTTTCAGGG TACATTGTT TNCTNCTGCT GTTAATTAGG TGTATCCCCA 240  
AGACAATAAA TACATGGNTG GGAAAGTAAA 270

SEQ ID NO:4392

LENGTH:123

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05219

SEQUENCE DESCRIPTION:

GATCAAAATT GGNTAAATTC TATTGTAACA ATTCGTTGG TCATTTGGG CCATAAAATT 60  
TTTTGTAAT AGGAATTGT ATAAAGCATT ACTCTTTTC AATAAATTGT TTTTAATT 120  
AAA 123

SEQ ID NO:4393

LENGTH:288

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05220

SEQUENCE DESCRIPTION:

GATCNCACCA GTNTNCTNCA NCCTGGCCA CAGAGCAAGA CCTTGACTCA AAAACAACAA 60  
CAACAAACAAAC AAAAATCTT GAAGATTITG CATTCTGTCC CACTATCCAT TGGTTTCAT 120  
GTCAAGATAA TGTGAGAAAT TCTTACAAT TGCTTCCAGA AGGANTAGCC TTTTGATTTA 180  
GTGCACAGGT GTCCAGTCTT TTGGCTTCTC AGGCCACAT TGGAAGAAGA ATGCTCCTGA 240  
GCCACACACATA AAATACACTA NTGNTAACAA CAGCTGATGG AGCTTAAA 288

SEQ ID NO:4394

LENGTH:156

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05221

SEQUENCE DESCRIPTION:

GATCCTNCGT TCTNTTGTG TAGATTAGTT TGCCTTCCT ACAATTTAT ACACATGGAA 60

01378

TAATACTATA GGTACTCTTG TTTGGCTCCT NCATCCAGC ATAATAAGTT TGAGATTCA 120  
 NCATGTTGTT ATATGCGTCT ATGTTCATTC CTNNNN 156

SEQ ID NO:4395

LENGTH:149

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05223

SEQUENCE DESCRIPTION:

GATCCTNCTT TTCCTTCATG NCAGCACAAG TGCTCACCGG GGCCAGAGCC AGGGCATGGA 60  
 TATGACAAGC AGGGCAGCCT GGACACTGCC CTCACAGGAC AGCGCCAATA ACAATACAGT 120  
 GTCTGAGTAT CTCCAGGGGA AAAAATAAA 149

SEQ ID NO:4396

LENGTH:204

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05224

SEQUENCE DESCRIPTION:

GATCCTGCTT GGNCTATCAC AGAGCATTGA CCATTGGCTT CCCTCATCTG AGNCGTGGGA 60  
 GAGCANACTG GATAGATGAG AATTGTTTA AAACAATTGT GAACAGAAC TGNAGATGGT 120  
 ACAGTNCTAC ATCTGCACCT GCCCTTTTT CATACCACAA AAGTATTTT NNAGTACTGT 180  
 ACTGGACTTT TTGCNAGTNN CTAN 204

SEQ ID NO:4397

LENGTH:213

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05227

SEQUENCE DESCRIPTION:

GATCCTGATG TATGAGGAAA AAGCGAGAGA AAAGGAAANG CCAACAGGCC CCCCAGCCAA 60  
 GAAAGCTATC TNTGAGTTGC CCTGATTGA AGGGAAAAGG GATGATGGGA TTGAAGGGC 120  
 TTCTAATGNC CCAGATATGG AAACAGAAGA CAAANTNTA AGCCAGAGTC AACAAATTAA 180  
 NTAAATTACC CCCTCCTCCA ANAANTANTT TNN 213

SEQ ID NO:4398

LENGTH:67

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05228

SEQUENCE DESCRIPTION:

GATCCATCTG AGGAATCACT CTGTGTTGCA CTTATGCCCT CATAAAANAT ATTTATTGAA 60  
 GAATAAA 67

SEQ ID NO:4399

LENGTH:70

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05229

SEQUENCE DESCRIPTION:

GATCAATGCA TTTNATACGG ATATAGACCT AGGGCTCTGG AGGGTGGGN ATTGTTAAA 60  
CACATGCAAA 70

SEQ ID NO:4400

LENGTH:148

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05230

SEQUENCE DESCRIPTION:

GATCTCTATA GAGGCTGGAA TGGCCACAGA GAATCTAAAT NTGAAAACAA ACATGTCCTG 60  
AGGGTGTGCT CCAATACCA C CNNNTAACAC TCTCCTGAGA TGTGAAGGCT NGAAATGAGA 120  
ATGCCATNTT ATTGTNACTT NCAACGN 148

SEQ ID NO:4401

LENGTH:210

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05231

SEQUENCE DESCRIPTION:

GATCCTTGTT TTGAGCTCTC AGAATCACTC AGACAACATT TTGTAAC TGC TGCTGTTGCT 60  
TTCTACATAC ACCTTATAAA GTGACATTC AAAAGAAATA AGGTGCCACA GTTTAAACC 120  
AGAAGGTGGC ACTCTGTGGC TCCNTGTAGT ATTATAGCTA TACTGGAAA GCATAGATA 180  
AGCAATAAAG TACAGTAATT TTACTTTAAA 210

SEQ ID NO:4402

LENGTH:71

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05232

SEQUENCE DESCRIPTION:

GATCCTGTT CAAACTGTGA ATATTCTGAT GATGCCAGTA CAGTTGATT TATTAATGT 60  
GGGTCTCAA A 71

SEQ ID NO:4403

LENGTH:240

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05233

SEQUENCE DESCRIPTION:

GATCTGAACC CGTCTCCGG GTGCTGTAAA TAGTCTGATA AACGTTCAC A CAGTCTAAA 60

2153480

TTACCCCTTA TATTGCTGA ATACAACCTCA TCTTTGTAG TTTAAAATTT CTATTGTTT 120  
GGAGCTAGCT GTGAGTTCT AGAAGTGTAC AGAGTTGCTC CNGTGTCCC GGGTCANGTT 180  
GAGTAGGGAA TAAATAAAC TGATGCNGCC TCCTGAGGCT GCCGGGGGT TTCTGCTAAA 240

SEQ ID NO:4404

LENGTH:67

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05234

SEQUENCE DESCRIPTION:

GATCAAGNAT ATTTTTATT TTTAAGAAAG CATAACCAGC AATAAAAATA CTATTTTGA 60  
GTCTAAA 67

SEQ ID NO:4405

LENGTH:173

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05235

SEQUENCE DESCRIPTION:

GATCTAATTG CAAGGACTTC TCCACAGCTA AGTNAGATGC CTCANACCAT TAGGTGATGC 60  
TTTGGACAGA ACAGAGTATT TNAATCTTGT GTTTAAAGCA ATTCCCTGGC TTCGGCTCCT 120  
CACCACTTTC TATGCCAGTN TCCCATTAT GTCCCTAGTA ATGCCTATGC AAA 173

SEQ ID NO:4406

LENGTH:263

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05236

SEQUENCE DESCRIPTION:

GATCCCAGCA GTGATGTTGG TTGAGGCAGC AAACAGATGG CAGGATGGC ACTGCCGAGA 60  
ACAGCATTGG TCCCCAGAGCC CTGGGCATCA GACCTTAACC ACCAGGCCA CAGCCCAGCG 120  
AGGGAGAGGT CGTGAGGCCA GCTCCCGGGG CCCCTGTAAC CCTACTNTCC TCTNTCCCTG 180  
GACCTCAGAG GTGACACCCA TTGGGCCCTT CCGGCATGCC CCCAGTTACT GTAAATNTGG 240  
CCCCCAGTGG GCATGGAGCC AAA 263

SEQ ID NO:4407

LENGTH:65

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05237

SEQUENCE DESCRIPTION:

GATCAGAAATG TTCTAAATNT TGACTAGTTA CTTTTATTA TGAGTTAATA TAGTTAGCA 60  
GTAAA 65

SEQ ID NO:4408

01381

2153480

LENGTH:124

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05238

SEQUENCE DESCRIPTION:

GATCTCTATA TAAATNCTA AAATGGGATT AAAAGAAGAG TTGGAGAATT CACACTTATT 60  
GAGTAACTGA TGTCATACAA CCTGGAATT CTGAATTCCA AATAAATAAA TTCACTCTT 120  
TAAA 124

SEQ ID NO:4409

LENGTH:234

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05239

SEQUENCE DESCRIPTION:

GATCTATGCA GTATACATTT TNCAAGGCTGA ATTCAAGGG GAATCATTCT GATTATNCTT 60  
ACTACAAATG GAGATGGCTA TTATGAAACA GCATGAGCAT GAGCCTTNA TCTNTNATAC 120  
TTAGTGATAT ACTTGCTTG AAAATCACTC AGCAAAGTAG TTCACATGAT GTGTTATCAT 180  
ATTTGANGTG TGGNTNTCT CAAAATCATT GNCTTAAGG NGCTCATTNC TGAN 234

SEQ ID NO:4410

LENGTH:191

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05240

SEQUENCE DESCRIPTION:

GATCTNTTG TATGTNACGT GTTAAGGGCT TGTTGGTAT CCCACTGAAA TGTTCTGTGT 60  
TGCAGACCAG AGTCTGTTA TGTCAGGGGG ATGGGGCCAT TGCATCCTTA GCCATTGTCA 120  
CAAAATATGT GGAGTAGTAA CTNAATATGT AAAGTNGTAA CATAACATACA NTTAAATGG 180  
ANATGCAGAA A 191

SEQ ID NO:4411

LENGTH:308

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05241

SEQUENCE DESCRIPTION:

GATCACCTGA GCTGCCCTCAG ATTCCATTG GTCCTCTCCT TCCTGGAAGG CTTCTTTA 60  
TGTTTGTTT TAATCCAAA TGTCTGAATG TTTGCAGTG TGTAGGGTT TGAGCCCCCTT 120  
GTTCAATTCTC CTTCTTTT CCTCCCGCTT CCCCTCTCCAT GAACTGATTC TGTTGACAAT 180  
AATGTATACT GCGCGTNCTC TTCACTGGTT TATCTGCAGA AATNNCTCTG GGCTTTNTC 240  
GGTGTAGAT TCAACACTGC GCTAAAGCGG GGATGTTCCA TTGAATAAAA GAGCAGTGTG 300  
GTTTTAAA 308

SEQ ID NO:4412

01382

2153480

LENGTH:210

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05242

SEQUENCE DESCRIPTION:

GATCCACCCA CCTTGGCCTC CCAAAGTGCT GGGATTACAG GCGTGACACN CAAACCCAGC 60  
CACCAATTT ACTTTAGTA AACTTTTATT TTCAAGCTTT TGTTGGTGT GCAAGTGTAA 120  
ATCTGTTTA TAAAATGTC TATAAATATA ACCACTATTG CTTGTAAGCT ATTTAAAATA 180  
AATTTAAAG TCTTCAAGT AAACACCAAA 210

SEQ ID NO:4413

LENGTH:337

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05243

SEQUENCE DESCRIPTION:

GATCTGAATT TAGGNACATT TCCTTTTCT GTGGGAATCA CAAGAGTTA TCCACTAAAA 60  
AAAGATATGT AAAAAGATA CTTCCAGCA CATAAATAAA GGCTGGAATT TTACAACCTG 120  
ATGTATATAT TAGACAGTTC TAGGATGTTA GTTCCCTNCA TNCCAGAGCT ATGCTGTGA 180  
TACAGCCCT TTTCTTATAA AGTCAGTTAG ANGGACTTCC TTAACAATGA CTATTATAAT 240  
GNCTTNCTTA AAATACAGTT TTGTATTCTG TCAATGCAGA TATAAGACAG GTTGTGCCNT 300  
AATCATGTAN CANGNNATT TTGNAGNTT ACATATN 337

SEQ ID NO:4414

LENGTH:120

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05244

SEQUENCE DESCRIPTION:

GATCAGCTAG CTACCTCTA CTTCCATTG TTCAAGTGGG TTGTTCTCTT AATTTGTATA 60  
TAACCTGTTG TCTAAATTTT ATGTACAGTC TTTTATAATA AACCAATTCTC CTATATGAAA 120

SEQ ID NO:4415

LENGTH:185

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05245

SEQUENCE DESCRIPTION:

GATCTGGCTC ATCCATCTGC ACACtgacca CGCTAAGAGC TGTCTGCAGT GATGGAAACC 60  
TTCTCTAGCT GTGCTGTCCCT CTATAGTGGC ACCAGCTGCC TGTGGCTACT GAGCACTTCA 120  
ACTGTGGCTG CAGAGACTAT GTTAAATTGT ATTTAATCAT ATTAATTAA ATTGTAAACA 180  
ACAAA 185

SEQ ID NO:4416

LENGTH:58

01383

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05246

SEQUENCE DESCRIPTION:

GATCTAAAAA TTCGTTGCC TTTTAAAGC TATATTAAAANGTATTGTT GAATCAA 58

SEQ ID NO:4417

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05247

SEQUENCE DESCRIPTION:

GATCCACAAAG ATTNAGAAAAA TATTATATAG TTAGATAATA ACATTCTGT CTACTGATAT 60  
CCNANCTNGT TACAAAATTN TTTAAAACCTT AAATAAAAAC ATGCATCTN 109

SEQ ID NO:4418

LENGTH:363

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05248

SEQUENCE DESCRIPTION:

GATCCCTCA CAGAGCTTCC CTGACTCATT CTGAAGGAGC CCCATTCTG GGAAATATTC 60  
CCTAGAAACT TCCAATCCC CTAAGCAGAC CACTGATAAA ACCATGTAGA AAATTGTNA 120  
TTTGCAACC TCGCTGGACT CTCAGTCTCT GAGCAGTGAA TGATTCACTG TTAAATGTGA 180  
TGAATACTGT ATTTNGTATT GTTCAATTG CATCTCCAG ATAATGTGAA AATGGTCCAG 240  
GAGAAGGCCA ATTCCATAC GCAGCGTGCT TAAAAAAATA AATAAGANAC AACTCTTG 300  
GAAACANCAA TTCTACTTT GAAGTCATAC CAATGAAAAT GTATATGC ACTTATAATT 360  
TTN 363

SEQ ID NO:4419

LENGTH:266

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05249

SEQUENCE DESCRIPTION:

GATCACATTC AGGATAAGTG TACAGAAGAA AATACGGGTG TTTACTCTTT AGGGAACCTGG 60  
AAACACTCCC TGCATTGATG TACATTTAA GAATGGCACT TTTGATAACAT GTTATCATAA 120  
AGGTGCTTAA TAGAGCTGAA TTAAAGTTT TCAAATCTGT AAACANNGCA AAAANGTAAA 180  
TTGTAGTCAT TTGATTATTT TTTAAATNGG NGCTTTATAT TTNGTNCTCA CTCAGAGTAA 240  
AAGCTGCAAT TTATTGTNCA CCCAAA 266

SEQ ID NO:4420

LENGTH:104

TYPE:nucleic acid

TOPOLOGY:linear

01384

2153480

CLONE:HUMGS05251

SEQUENCE DESCRIPTION:

GATCAAAGCA ATTTACAGAT TCAATGCTAT TCCTGTCAA CCACCTATGA CATTCTTCAC 60  
AGAACTAGAA GAATAAACTA TTAAAAGTTC GTATAAAGTT TAAA 104

SEQ ID NO:4421

LENGTH:256

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05252

SEQUENCE DESCRIPTION:

GATCTCAACA GTGTGGGTG AACAAAGAAGA CTGTATCTTC AGCCTTTTC CTATAATCAT 60  
GGATGATTG GTCTTATTCA AAAGGACCGC ACATATTAGT ACTCTTAAGA GCATCTCCA 120  
AGACTCCAGC AGNGAGCATT TAGAGAGTGT GTTGTCTCC AGAGTCATGA ATGATTTGT 180  
TTAGCTATCA GGTCTACTAC CTCTAAGGAC ATTCATAGC AGCATCTCTT GAGTTGCCTG 240  
CATCAGTGTG GTGGTN 256

SEQ ID NO:4422

LENGTH:255

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05253

SEQUENCE DESCRIPTION:

GATCTGAATA TAATTCTGGT AAACAGCTGT CTTCATTTTT NTCCCTCTAAA GAACTTAATT 60  
CATTTGTTAC ATAAAATATA AGGAAATCTT TGTACTATTT TACAGTAACC ACAATCTAAA 120  
TATTTACATA TACCCAAAAT TANCTTATGC TCATATATTA GGATGTGAGA NTATCATCTG 180  
TTTATGGACA CATGAAACCT CCTAATGACC TGGAATTGTT AGANTATNTG ACTTTTATA 240  
TGCAAAGTTT TTCGN 255

SEQ ID NO:4423

LENGTH:58

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05254

SEQUENCE DESCRIPTION:

GATCCCCGGT GGTTTGTGC TCAAAATAAA AACTGATTAA ACCTTTGTGG CTGTGAAA 58

SEQ ID NO:4424

LENGTH:234

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05255

SEQUENCE DESCRIPTION:

GATCCTTTC TTCTCTTATA AATCATCCTC TTAATGAAAA TTAGCCTAAC AAAAGTTGG 60  
AGACTGGAAT CCTACTTTGA GCCACTGACT TGAAATACT CTTTGGCAA GTTGCCTGAC 120

01385

2153480

ATCCTGTCTT ACCAAGGTGG CAGGTTGCA TTTTACTGC TTAAAACATT TTNNTTTTT 180  
TAACCATCTT NANCAAATT NATCATATNN GNGGTNGGCC TANCAGGNTT TTNN 234

SEQ ID NO:4425

LENGTH:200

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05259

SEQUENCE DESCRIPTION:

GATCCACCTG CCTCAGCCTC CCAAANTGCA NGGTATTACA GNCANGAGNT TCTGCGTCTG 60  
GCAATAATGT AACTTGAAAG CTTAAAAATT ATCCAGTT TGTAGCAATA ACAGAAGACT 120  
ATCTACAAACG GAAGAAAGAA GCAACTGCCT TACAGTTCTG TAAAGANTG GCAAGAAAAT 180  
AAAGCCTATA GTGCCGAAA 200

SEQ ID NO:4426

LENGTH:84

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05260

SEQUENCE DESCRIPTION:

GATCTAGTCA TCTTCTGTAG CTACATAGTA CTCCTAATGT TAAGATTACC AAATTCAAGCA 60  
ATAAAGCCAA AATCAAAACT GAAA 84

SEQ ID NO:4427

LENGTH:75

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05262

SEQUENCE DESCRIPTION:

GATCATAAAC CAGTGNNAATC AGACCTATGT GTAATAAGAC TCCTGTTAAT ACAAAAATAA 60  
AAAGCTAAAA GCAA 75

SEQ ID NO:4428

LENGTH:424

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05263

SEQUENCE DESCRIPTION:

GATCTAAAC TTGCTTAAA TCAACAACCT TCTACTCATG TTAATGTCTT GATTAATAT 60  
CACAAATGCAA AATACACATT AAGTAAAAGA ATTCCAGCTG GTAAACATGA CCTGGACATT 120  
TGTAAGAATA TATTTAATAT ATGTCACCC ATTATGTTT TAGGTAACAG GNGGNAAAT 180  
GCANCNCAAT TTTTTCTC TTGAAAGGCA CTGTCATTAA ANCATAAACCC TGGAGTACTC 240  
GAAATAGAAT TCAGGTTAC ANGATGAAAG CGTGTGGAGA AGTGTCAAGAT GGCAGTGGNA 300  
GCATGTGTGT TTCTAAAANG TAAAANTCTC AAGGAAACCA NGANATGGCA TGCTTTACC 360  
CATCTTNCT TAGTGAAAAG NGTGCTTCAG GTTGANATT GTTTAAGAA AGNTAGCCGG 420

01386

2153480

GNTN

424

SEQ ID NO:4429

LENGTH:122

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05264

SEQUENCE DESCRIPTION:

GATCTGCTCC CTCTCGCTCT CTCACCCAC TACTTTTG AACAAAGTGA TGGCAGAATG 60  
CGGTGGTGGT GGGGGTCTTT TGTACTGTTG GATTAATAAA ATGATTNAA ATTNCNNNTA 120  
AA 122

SEQ ID NO:4430

LENGTH:85

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05266

SEQUENCE DESCRIPTION:

GATCAGTATA ATTTTNAAA GTTACTTTGT NAGAGGCACA AAAGGGTTA AACTGNTCA 60  
TAATAAATAT CTGTACTTCT TCAAA 85.

SEQ ID NO:4431

LENGTH:187

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05267

SEQUENCE DESCRIPTION:

GATCACGTAG ACATGTAACC CAGCAGCAGT TTGCTTCTGT TGTCCACTGA TTAATCAGCC 60  
TATGTGCCCTG ACACTGGTCT TGCACTACAA CTGNAAGCCA AAACAAGGTG GAAGATGTCC 120  
TGAATTAAGA TGTTTCACC ACATTGTATT ACAGAGACAG CCAATAAAC TACTATTGA 180  
TTTCAAA 187

SEQ ID NO:4432

LENGTH:211

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05269

SEQUENCE DESCRIPTION:

GATCTTTAT TTNTGAAACA CTCAAACACC TTACAAAGTG CTGAGTAGGT AATAGTGACC 60  
CAACTTGTCTT GCTAAATGAT TATTGTTA AATCTGTACA GTTTTAAGTG TTCACTTATA 120  
CAAAGAGTGT ATATACTTTC AAATAATTNA AAATGCTTTA NATTATNNNGG CTAGAAATTG 180  
CNGTTTNAA TAAATGTGAA TNTNTNAAAA N 211

SEQ ID NO:4433

LENGTH:62

01387

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05270

SEQUENCE DESCRIPTION:

GATCTGTTGT TAGGATTCTA GTTAACACTT TTNTTTAA AAACTAAGGA CAAATGAACA 60  
AA 62

SEQ ID NO:4434

LENGTH:98

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05271

SEQUENCE DESCRIPTION:

GATCCCAGGG GAGGGGTCTC TCTCCCCATC CCAAGTCATC CAGCCCTTCT CCCTGCACTC 60  
ATGAAACCCC AATAAATATC CTCATTGACA ACCAGAAA 98

SEQ ID NO:4435

LENGTH:239

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05272

SEQUENCE DESCRIPTION:

GATCGTATCC CGCTGACACA GAAGGNGGCC GGGTGGGGGG AGGGCACCCA TGAAATTCAA 60  
AGAAAACCCCT AAGTGTGGAT GTTCAGAATT TTGGAAAAAT GTCACTGAAG TGATTGAAAG 120  
AGTGCCTGGC ATGCAAGGNT AAGAGGTTCT TTACATAACA TTTCTAAAT GCTTAATAAA 180  
CGTTTGTGC ACTTGGTTT GACATTGCCA ATGGGGTTG AACCAAGTGCT CTCTCTAAA 239

SEQ ID NO:4436

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05273

SEQUENCE DESCRIPTION:

GATCTGCAAT GACTGGAAT TGCCGGTGCC TGGGGTGCT TTCCCCCAGC CAGGGTCCAA 60  
AGAAGCTTGG CTGGGGCAGA AATAAACCAT ATTGGTCGGA AA 102

SEQ ID NO:4437

LENGTH:333

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05274

SEQUENCE DESCRIPTION:

GATCTTCTTT TGGGAGGATT TGATGTAAGT NACTGACAAG CCTCAGCAAA CCCAAAGATG 60  
TTAACAGTAT TTTAAGAAGT TGCTGCAGAT TCCCTTGGCC ACTGTATTG TTAATTNCTT 120  
GCAATTGAA GGTACGAGTA GAGGTTAAA GAAAANTCAG TTTTGTNCT TAAAANTGCA 180

01388

2153480

TTAAGTTGT AAACGTCTT TTAAGCCTT GANGGCCTC TGATTCTATG TAACTNGTTG 240  
CAGACTGGTG TTAATGAGTA TATGTNACAG TTTAAAANAA AAGTTGGTAT TTTATANGCA 300  
CAGTCATNC TNATGGTAAC TTTGGTNGT CTN 333

SEQ ID NO:4438

LENGTH:72

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05275

SEQUENCE DESCRIPTION:

GATCAATGTT TCAGCCCTAG ACTGCCAAG GAGTATTATT AATTATAAT AAATGAATT 60  
TGTGCTTTA AA 72

SEQ ID NO:4439

LENGTH:100

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05276

SEQUENCE DESCRIPTION:

GATCAGATTA TTTTACTACC AACAGTTATA GTTGAAAGT CCAACTGTAT TAATTGACTG 60  
ATAATATGAT AATATAGAGA TTAAATTGTT TGTNTTCAAA 100

SEQ ID NO:4440

LENGTH:96

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05278

SEQUENCE DESCRIPTION:

GATCACAAAG AGCAAACAAA TGTCAATATC TCTTATGAAT GGTGAAAAAA AGGAATTAAT 60  
CGATGCAAAT AAACTTTCA CAGTATTACT TTAA 96

SEQ ID NO:4441

LENGTH:116

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05279

SEQUENCE DESCRIPTION:

GATCTAGCAA GCCATGGCGA CAGGTAGCAT TTNTAAGATG NTGNACAGGA GCAGNATTAT 60  
CCCCAAAGAT ATTACAGGGT AGACACGTTT TAACTAAAAT CAATCAAGNT AACTTN 116

SEQ ID NO:4442

LENGTH:411

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05280

01389

**2153480**

**SEQUENCE DESCRIPTION:**

GATCTGACAT ATATCACCTT CTGGGNTATT TACTCATTGT GCCAGGACCT GGCATTTCA 60  
TGTGCCTTG ACCAAGTGT CAGAATTGTC TTGNCTCTAA CCTGGAGAGC TTCTTAAGTG 120  
ATGCCCTTC ATGGAGCTC TATGACAGTG AATAAACTAT TAATTGAAGG AAAATGTTAT 180  
AATTAANGTA TCTATTGCT GCATTGTATA TGGATTAANT GNTAAAAAAC AAGTAATCTA 240  
CCCTCAGAGC CATGTATTTG AGAATGCTTT CAATCATATT TNCCATGNA CTTTTTTTT 300  
ATAAACTTAG TTTTANGCCT ATGTTGTAAA ANTGGGAAGG TTNGTAAACN TATGTTGGN 360  
AAAAANTAGGG GAAATGTNGG CTTAAANTTN TTTNCANTT ATNTTNGTT N 411

**SEQ ID NO:4443**

**LENGTH:90**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS05281**

**SEQUENCE DESCRIPTION:**

GATCTATCTG GGGGTCTAG TGTACCACAA GCTGAACCTG AAGATTTGGA AAAATGTTTC 60  
TAATTAAATA AAACAGAGCA AAAAGACAAA 90

**SEQ ID NO:4444**

**LENGTH:342**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS05282**

**SEQUENCE DESCRIPTION:**

GATCTACATT TAAAGGAAA AATTAGCACT ATTGAAAGC TCAGTTNAA TCATTGTCTT 60  
AACTTCAGAT ACAAAATACT GAACAGAAAAG TTTAACCTT TAATATCTCA TGTNCTGTTT 120  
NTTATTTCAGT ATTTCCNT ATGTTAACTC AATTATATAC TTCTGAATGG CACCTTACTT 180  
TTTGGAAACA AATCTCTGT TATTTACAAA ATAATAATT TTANAAAACA TTTAAAAAAA 240  
ATCCAAAGCT GCTCTCGATA ATAGTCAACA TTTGCAATATA TATGGAATT CTTACTTTNT 300  
TTCTCCAAA CTCTATTAA TAAACTNATT TTAATGGTTA AA 342

**SEQ ID NO:4445**

**LENGTH:61**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS05283**

**SEQUENCE DESCRIPTION:**

GATCACAAAA ATGTATTTA TAAAATGTTC TGTACAATAA AGTTACACCT CAAAGTGTAA 60  
A 61

**SEQ ID NO:4446**

**LENGTH:301**

**TYPE:nucleic acid**

**TOPOLOGY:linear**

**CLONE:HUMGS05284**

**01390**

2153480

SEQUENCE DESCRIPTION:

GATCATTATC AGTAATTCA TAGCAACTGT TCTAGNGTTT TGNGTTTTA AAACAGAATT 60  
AGGAATTGAT GATATCTGAT TATATTTTC ATATGAATCA CAGCTGTTGA CAATGTCCCA 120  
TATATTAAG AAATTATATC ATACTGATAC TATTTGTAAC ATTTGATTT GATTTAATCT 180  
CCAGGGACAG AAATAATTCA TTGGTAAAGN GTAATAATGC GTTTTTAAA AATGCTTGAA 240  
GAGGTAAATTA CTTGCATATG AGAGAAATAA AACATTGGC ACATTGTTA CAGGTGTGAA 300  
A 301

SEQ ID NO:4447

LENGTH:153

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05285

SEQUENCE DESCRIPTION:

GATCAGACCG AGAACGAGGG TGAGAGATTG TAACGACTGG ATGCTGCTAG TAACACATTG 60  
TTTGTATTGC TTTACCATT TTAACTGTTA GATTTGAGAT GAACATACAT TTTGCTTTT 120  
TAATAATGT TTAAAAGAAG TCCACATAAG AAA 153

SEQ ID NO:4448

LENGTH:216

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05286

SEQUENCE DESCRIPTION:

GATCACTACA GTGAAGTATT ACAGTTGTAC AGTTCCAGT CTGGCCTTGG CTTGCTCGGA 60  
TAAAAATTC TATGTATTT GTATGGCATA GATTCTATAT TGTAATGATG TCCTATGCAA 120  
AAAGAAAAAT TAACGAAATT GTAAATTTA TTGTTTAAC GTGTATGCAT GTTAGTGAC 180  
GTTTACATT TGAAATAAA TTTATGATT ATTAAA 216

SEQ ID NO:4449

LENGTH:172

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05287

SEQUENCE DESCRIPTION:

GATCTGGAAA CGTTTTGTAC CGATTATCCA CAGCAAAACA AAAATAAGCT TTTATTTAT 60  
TAATAATTTC GTTCTCTTG TGCCCAATCA AATCTTTAG GAACAAACTG CAAGAAAAGC 120  
TAAGAATGTT TTAGAGTGAA CAAATACAG ACATTGCTTA CTTGTTTGA AA 172

SEQ ID NO:4450

LENGTH:289

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05288

SEQUENCE DESCRIPTION:

01391

2153480

GATCTCCCTG TGGCAGCAGG CATGGAGAGT CAGGGCTGCC TTCATGGCAG TAGGCTCTAA 60  
GTGGGTGACT GGCCACAGGC CGAGAAAAGG GTACAGCCTC TAGGTGGGGT TCCCAAAGAC 120  
GCCTTCAGGC TGGACTGAGC TGCTCTCCA CAGGGTTCT GTGCAGCTGG ATTTCTCTG 180  
TTGCATACAT GCCTGGCATC TGTCTCCCCT TGGCAATAAA AGTACTCTGG ATGCTGAAA 240  
AGCAGGCTGT ATCTGGATTG TGGCAATAAA AGTACTCTGG ATGCTGAAA 289

SEQ ID NO:4451

LENGTH:121

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05289

SEQUENCE DESCRIPTION:

GATCTCTTAA AAATACCACA GTTTGTATTT TTCTTTAAG GAGTAAAGAT TTGCCTTAA 60  
ATAACTTGGT ATTTCTGG CTTCGTTTA ATACAATAGA AAATAAAAGTA TTACACCGAA 120  
A 121

SEQ ID NO:4452

LENGTH:293

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05290

SEQUENCE DESCRIPTION:

GATCAATGTG ACGGCAGGGA AATGTATGTG TGTCTATTT GTAAGTGTAA AGATGAATGT 60  
CAGTTGTTAT TTATTGAAAT GATTCACAG TGTGTGGTCA ACATTTCTCA TGTGAAGCT 120  
TTAAGAACTA AAATGTTCTA AATATCCCTT GGACATTTA TGTCTTCTT GTAAGGCATA 180  
CTGCCTTGTT TAATGTTAAT TATGCAGTGT TTCCCTCTGT GTTAGAGCAG AGAGGTTCG 240  
ATATTTATTG ATGTTTCAC AAAGAACAGG AAAATAAAAT ATTTAAAAAT AAA 293

SEQ ID NO:4453

LENGTH:336

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05291

SEQUENCE DESCRIPTION:

GATCTAGGTC CTTCTATCTC GTCCCTCTAC AGATGTATTT TCCACTTGCA TAATTGATGC 60  
CAACACTGGT TTTCTTAGGT TTCTCCATT TCACCTCTAG TGATGGCCCT ACTCATATCT 120  
TCTCTAATTG GGTCTGTATA CTTGTTCTT TTCACGTTT CCCATTTCCC TGTGGCTCAC 180  
TGTCTTACAA TCACTGCTGT GGAATCATGA TACCACTTT AGCTCTTGC ATCTTCTTC 240  
AGTGTATTT TGTTTTCAA GAGGAAGTAG ATTTAACTG GACAACTTG AGTACTGACA 300  
TCATTGATAA ATAAACTGGC TTGTGGTTTC AATAAA 336

SEQ ID NO:4454

LENGTH:252

TYPE:nucleic acid

TOPOLOGY:linear

01392

**2153480**

CLONE:HUMGS05292

SEQUENCE DESCRIPTION:

GATCTGCTGC AACCATTATC TTNGTTCTTG AGTCATCAT GCATTTAAAA TGAGATGCAA 60  
GAGCATTAG CATAACCATGT AAATATGGAC CTTTAAAT TAAAATACTA TTGGAAGTGC 120  
TTTCAACTCA GCCACATCTT AGCTATTAGT TCTTGTGTT GTCTTATCAA AGTTAATGG 180  
ATACAGTTCC ACAGTTGTTG ATGTGTTGT GTGTATATTC GATTNNNNNA AAGATGGTAG 240  
TAAGTCAATA AA 252

SEQ ID NO:4455

LENGTH:57

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05293

SEQUENCE DESCRIPTION:

GATCATAACCA CTCCACTCCA GCCTGGCAA CACAGCGAGA CTCCATGCTC CCCCAA 57

SEQ ID NO:4456

LENGTH:564

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05294

SEQUENCE DESCRIPTION:

GATCAGGCTC TCCTCATGCT GTTTAGTGAT GGCACTGTCC AGGTGAACTN CTACGGGGAC 60  
CACACCAAGC TGATTCTCAG TGGCTGGAG CCCCTCCTTG TGACTTTGTG GGGCCGAAAT 120  
CGTAGTGCTT GTACTTACCT CGCTTCCCAC CTTCGGCAGC TGGGCTGCTC TCCAGACCTG 180  
CGGCAGCGAC TCCGCTATGC TCTGCGCCTG CTCCGGGACC GCAGCCCCAGC CTAGGACCCA 240  
AGCCCTGAGG CCTGAGGCCT GTGCCCTGTNA GGCTCTGGCC CTTGCCCTTG TGGCCTTCCC 300  
CNTTCCTTTG GTGCCTNACT GGGGGCTTTG GGCCTAATCC CCCAGGGAAAT CAAGGGACCA 360  
GCTTTACTNG AGTTTGGGN CGGGNTTGTG TTCGNTGGNT TCCTACCCCA TNTCCAAGAT 420  
AAGCCTTNAG CNTTAANTCC CANGNTAGGG GGCCTTATTT NATGGACCAA TTTTAATTT 480  
ATTNTAAGAA ANTTNTTTA NTTGGGGATT TTAAGCCAA AGGGGGGCC TCNTCCTNAG 540  
GTNANAAAAN AATTTTTAA GAAA 564

SEQ ID NO:4457

LENGTH:112

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05295

SEQUENCE DESCRIPTION:

GATCTTATT TTTGATTAAT TTGTTCTGAT TTTTGTTT GTTTTTAAG GAACTGTAAT 60  
GAACAAATGT CAGGATATCC AATGCCAAAT AAAGATGTTG TATTTATTTA AA 112

SEQ ID NO:4458

LENGTH:152

TYPE:nucleic acid

**01393**

2153480

TOPOLOGY:linear

CLONE:HUMGS05296

SEQUENCE DESCRIPTION:

GATCACACCC NGGTGAAACCC ANGGTGCTAA GANTGAAAAT AACCTGGTG AAATGTACAA 60  
NTTAAAGACA AAGAACTACA TGTGAAGATA GACTTGCTTT CTATTTNAA ATCAGTAGTA 120  
GTACTGTTGC TGAATAATAC TAGGTTTNN CN 152

SEQ ID NO:4459

LENGTH:323

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05297

SEQUENCE DESCRIPTION:

GATCTGGTGC TGCTTCAGA TGTTTATCTT TTATTTTTT CCCTTAAGCT TTAATCTCG 60  
TCATTGTCTT AAAGTCAACT GGTGTTCTT GTTCATTGAC TTTGGTACGA TGGTGCTTG 120  
CAAGGATGTA TTTATGTTAT AATGCCAAC ATTGGTCAG CCCTTGTCCA CTTATTCACT 180  
TCCCTCCNTT TGTAAAATAA GTGCTTAAAT TATAAAACTGT ATAAAAATAC CTTGTATAAA 240  
CCCCTTTTT GATTATTACA ATAATAAGC TGAATTGTAA CAAATGAAAT TTGATTTTG 300  
TAATAAAACA GTGGAAAAGT AAA 323

SEQ ID NO:4460

LENGTH:229

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05298

SEQUENCE DESCRIPTION:

GATCCTTTT AGTTAATACT ATGACAGTAC TAAAAATATA TGAATAACAT TTCAGATACC 60  
ATTATATTAA AATATTGTG TATGTGTACA AAAGCGTTGA TAAATACTAA TCTTTAAAGT 120  
TTGTGGAGTT CCTTTATTTG TAATATATGT GCTCTAAAA GCAATGGGAT GTGAAATTAT 180  
GAAAGTATT TATTGTTCAT AGAAATAAAA AACACAGTTA CTTTGCAAA 229

SEQ ID NO:4461

LENGTH:135

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05300

SEQUENCE DESCRIPTION:

GATCTGGACC TAATGAATTCTCAGAAAAT TCCCATGAGT CAGCTGATT CAGTGCTGCT 60  
GAACTAATTN CTGTGTCTAA ATTTCTTCCT ATTTCTGGAA TGGAAAAGGA GGNCATTCTG 120  
AGCCACACTG NNNNN 135

SEQ ID NO:4462

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

01394

2153480

CLONE:HUMGS05301

SEQUENCE DESCRIPTION:

GATCTGGGTA AAGGACCATC TGGGGATTCT TTGTACTATT TTTCTTCGG CAACTTTCA 60  
AGTTTCAAC TATTTGCAA TAAAGAGTTT TTGTTTGTAA AA 102

SEQ ID NO:4463

LENGTH:189

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05302

SEQUENCE DESCRIPTION:

GATCACATGG CTAAGGTGGT GTGTGCCAGG TTTCTCCACT GTAAAATTAG GAATTTCCC 60  
TTTGAAATTA ACAAGAACCT TCCACTTGA AGCTGTGTGA ATGTCTTATT CTTAAAATTT 120  
TGCCTACTGA TTTTNANNNN CATCATCAAT GATTCTTGCT TATAACAGGT ATTAATGTTA 180  
TGCTTGAAA 189

SEQ ID NO:4464

LENGTH:364

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05303

SEQUENCE DESCRIPTION:

GATCATGTTA ATTAAAGCT TTATACACAT TGGTGTCCCC TCTTTGGTAA 60  
TATGCTATAC CCCACTGCTG CCCGACACTG CCCNTAGCT GCAGAGCTGG ATTAGCTGTT 120  
GACCATTGTA TGCTGTTGTC TGTCTGGCAG GGACTGAATG ACCTGATGTC AGATTTAGAT 180  
TCTTCCTGGG GATTACACAG CTATGAATGT ATTGCTTCT AAAACCTCCC AAAGTGAATC 240  
TAATCTTAAA ACTACAAGTT GTAAGTATTG TGAAATTGGG AAACATTAT NTNAAATGCA 300  
ATCAGGNNAG TGTTGCTTT TACAGCATAA TNAATATANG TNTCAANNAN NGTGGANGGT 360  
NGTN 364

SEQ ID NO:4465

LENGTH:229

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05304

SEQUENCE DESCRIPTION:

GATCACTTGA TGTCAAGGGAG TTTGAGACCA GCCTGGCCAA CATGGTGAAC CCCATCTCA 60  
CTAAAAATAC GAAAATTAGC TGGGTGTTGT GGTAGGCACC TGTAATCTCA GTTACCTAGG 120  
AAACTGAGGC AGGAGAACATCA CTTGAACCTG GGAGTTGGAG GTTGCAGTGA GCCAAGATTG 180  
TGCCACTGCA GTCCAGCCTG GGTGATGAAA CAAGACTCTT TGTCTCAAA 229

SEQ ID NO:4466

LENGTH:496

TYPE:nucleic acid

TOPOLOGY:linear

01395

2153480

CLONE:HUMGS05305

SEQUENCE DESCRIPTION:

GATCTCTAAG GAACTCCGT TGCTAAATAT GAAGAGTATG GAACATTCA ATAGTCCTG 60  
TGAAGCATGG GGGGAGGGAA GACATTCTN TTNCCTTATAG GCTTTATGCT CAAATGTCAT 120  
AGTCTCCTT CAAAGAATTG TGTGCATT TAAATGCACC CAGCTTAAGT AGAAGACATT 180  
GAAGGATGCA TTAATTTCA GGAACATATTG TGGATTATGA AAAGATTCCC AATTGAAAAA 240  
ATTATTCAAC AAGTAAAAGC TAAGAAATTN CATTGAAATC ATAATGGCAG TTTAAGCATA 300  
AATTGATAA ANAATAGCTG TGTACTACTA AATTAATTAG GAAAATTCAA TTCCAANCCC 360  
AAGNNGAAGG AGTCCANGGT GGAAATATCC GGTTTGGTTT TATTTGNNC TTAGGNTGAN 420  
GTTTCTT GGTNAACCGN TTGNNTTTT TATTTAANAT NGNTTAATTA TTTTNNGTT 480  
AANGNTATGC CCCNTN 496

SEQ ID NO:4467

LENGTH:415

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05306

SEQUENCE DESCRIPTION:

GATCTGGGA GATATTAATA TCTGCTGCC AGACCTAAAA AAAACTGAAG GCCCAAGGAA 60  
AGTGACTGGA CTCACTGGAA AGTNTCTAAC AAATACTTG GATTCCAAAG TATTCCTAAC 120  
ACCTTGAAAGA TTCCCTTGAA AACATCAAAG CACAAACTCA AATCTGCACA AGATTACAAA 180  
AGCACAATTG TGGTGTATT TTTAGANTNC AATACACAAA GCTATTGTTT ATTCTNTCA 240  
GCAAGCATTG TCCTGGGTAG TAGTAATAGC TTAGGAATCA AATGCCACTT TTNTTTTCC 300  
TTTTTCCAC TAGTTGAAA TACCACAANT NACAGGTNAG TCAGTCCTCC CAGAGGNNA 360  
NGGNCAGTCC TAGGGNGNA TCAACAGGNCA TNGCAAGNCA AGNCCCACAA NTTNN 415

SEQ ID NO:4468

LENGTH:209

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05307

SEQUENCE DESCRIPTION:

GATCGCAAAT TGAAATATGG ATATTGTAC CAGGCTGCGT GTTTTCATT TTAAACACAC 60  
AAGATTTAAT TGAAAGGACA TCAATAATCA TAATTGTGTA TTTAACAGGT GGTTTTNTAT 120  
TAGTTCTN GTGTTTCAGA CTTTATGCAG CCATATAAAC TGTTCTCTAG GCATGCTGTG 180  
ACATTTAAT AAAAGCAAA AGGAGCAAA 209

SEQ ID NO:4469

LENGTH:353

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05308

SEQUENCE DESCRIPTION:

GATCGCACCT TTTATACCAAG AGACCTGAGG CAGATGAAAT TNATTCCAT CTAGGACTAG 60  
AAAAACTTGG GTCTCTTACG GCGAGACTGA GAGGCAGAAG TCAGCCGAA TGCCCTGTNAG 120

01396

2153480

TTTCATGGAG GGGAAACGCA AAACCTGCAG TTCCTGAGTA CTTTCTACAG GCCCGGCCA 180  
GCCCTAGGCCG GGGGTGCCA CACCACAGCA AGCCGGCCCC CNCTCTTTG GCCTTGGA 240  
TAAGGGAGAG TTGACCGTT TCATCCTGGC CTCCCTTGC TGTTGGATG TTTCCACGGG 300  
TCTNACTTAT ACCAAAGGGA AAACCTCTCA TTAAAGNCCG TATTCTTCT AAA 353

SEQ ID NO:4470

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05309

SEQUENCE DESCRIPTION:

GATCCTCTAA CACTGTACTA AAACATTCA ATAAAATCAT TCTGACTGCG TTCATAAAAA 60  
CAAA 64

SEQ ID NO:4471

LENGTH:169

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05310

SEQUENCE DESCRIPTION:

GATCTATTAC TGACCGTATG ATGAGGCCAA CTTTTTNCC TTGTGGTTAG CAAGACTGCA 60  
AGAGATGGAA AAAAAGTAGT TTGAATGTT TGTTGTAAAG GAGTATAACCA TGAGATGAGA 120  
TGACCACCAA TCATTCCTT GGGGGGAGGG GGTGTCTGCA CCNTAGAAA 169

SEQ ID NO:4472

LENGTH:132

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05311

SEQUENCE DESCRIPTION:

GATCACTTGA ACCCAGGAGT TTAAGTCCAG TCTGAGCAAG GCAGTGAGAC CCTGTCTCTA 60  
AACAAATAAA ATTAAATAA GTATTATCGA GAGTTCTGG AGGGGTGAAA TTAAAGACTT 120  
TCAAAACTTA AA 132

SEQ ID NO:4473

LENGTH:328

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05312

SEQUENCE DESCRIPTION:

GATCACCAAGG CTGCCAAGG GTGCTGTGCT CTACAAGACT TTTGTCCACG NGGNTCTGC 60  
CAAGCCTGAG GGCACCCGTC AAACCTGGTAG CTATGCTTNG ATGTCTGTGTT GAGGCCATCG 120  
GACAGAGACT GGAGCCCANG TGACAGGAGA TGGTGATACC AGAAGTCAAG GGTTGGGTG 180  
GCGACACGGC CTCCCGAGGA AGAGGTCTGC TTGATGGTGA CTCTGCAGGA GACTCTGAAG 240  
TGACTGCTGG GAAACCCTT GGGAGACCTN ACCTGNGGCC AAAANTAAAG TNNGCCAGCN 300

01397

2153480

TCATGAACCG CATNCTATT AAGGGAAA

328

SEQ ID NO:4474

LENGTH:307

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05313

SEQUENCE DESCRIPTION:

GATCTGGACA TGCTGTNACA AGAAATAGTG ACCTTGGGGA ATATGTACAG AAAAGACCTT 60  
TTCTAAGAG TTGGGAGGG GTGGGGGACT GTATAATGAA AAGAATTAGC TTACAAAAAA 120  
GAAATTGATA TTCAAAGTAT TTAGGCAAA GCCAGTCAAA ATGCTTCAT GATATTTGA 180  
GATGTAATT TTGTCTGATT TGTATTGTNC TTTCATTTG CCTCTTAAC TTTATATGTG 240  
ACCTGAATT TCCATAACTT GATGACTATA GATTGCACCT AGGCATTCCA ATAAAAGCCA 300  
ACCCAAA 307

SEQ ID NO:4475

LENGTH:133

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05314

SEQUENCE DESCRIPTION:

GATCGTAAAA ACATGTCTTA TGCGGAACCT TCATGTCAGA TGCTGGAGT GTGAAGTGTT 60  
CATTGGACAT TCCATTTAC TGTCGAAGT ATGGACTTAC ATATCAAATT AAAAGGCTCT 120  
TTGTTCTGC AAA 133

SEQ ID NO:4476

LENGTH:130

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05315

SEQUENCE DESCRIPTION:

GATCAACTGT CCTTAACAC AGCAGCATGA TACGCTGGNT TACCCAATCG CTTGTAAGGN 60  
AAGNCAGAGA TGACGTTATC CTGACTGCTG AGATGAGCAG TTTACCCTAG GAGGNCCNAT 120  
TNGGACTATN 130

SEQ ID NO:4477

LENGTH:105

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05316

SEQUENCE DESCRIPTION:

GATCAGCCAC ACAACTGTT TGTACATACT TATTTCTCA TGCACTTTC TGTATGCAA 60  
TAAAGCTATA AATTACTCA TTTCAATAAA CTGGAGTGGC AGAAA 105

SEQ ID NO:4478

01398

LENGTH:159

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05318

## SEQUENCE DESCRIPTION:

GATCTGGGAC AGANTTCACT CTCACCATCA GCAGTCTGCA ACCTGAAGAN TTTNCAACTN 60  
 ANTACTGTCA ACAGAGTTAC AGTCCCCGT GGACGCTCGG CCCAGGGACG AAGGTTGGAC 120  
 GTCAAACGAA CTGTGGCTGC ACCNTCTNTT TTCACTCTTN 159

SEQ ID NO:4479

LENGTH:170

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05319

## SEQUENCE DESCRIPTION:

GATCTGAAAA GAAGGTGAAT ATTTTCACT TTTGATACTC TTAGGAACAA ATAACTTATT 60  
 TGGCAAATTG TTTNTTTTT ATGTTTGGG TGTTGTTTT GTTTTTGAC TTTTTTGTA 120  
 TTGTGAACAG GCACTGAAGC TGATGTTATT TTAAGATTAC AGAATGGAAA 170

SEQ ID NO:4480

LENGTH:73

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05320

## SEQUENCE DESCRIPTION:

GATCATGTAA AATTACAGTA CTCAACCCTT CTAGCAAAGT ATTTGGNTGA AAAATAAACT 60  
 AAATGCCTT AAA 73

SEQ ID NO:4481

LENGTH:130

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05321

## SEQUENCE DESCRIPTION:

GATCCGCAGA GGGTGGTGG GATACACCGG ATACCTCTGC TCTCATTGCT TGTTTCCAAA 60  
 TGCTCTATGG ACATTTGTGT GCTAAATCCT ATAAATAAA AAAGACGGGT TAAAACCCAG 120  
 ATGCTGTAAA 130

SEQ ID NO:4482

LENGTH:56

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05322

## SEQUENCE DESCRIPTION:

GATCAAATTG AGAGACAATA AGTGTACATT GTTGAATAAA AAATTTAAA GTTAAA 56

2153480

SEQ ID NO:4483

LENGTH:90

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05323

SEQUENCE DESCRIPTION:

GATCTTGAGA GTATGTTCTT ACTCATTCT GTAATTGCAG TAGTGTAGTC ATCTGCATAT 60  
AGTTTTAATA AATGCATGTT AAAATTAAA 90

SEQ ID NO:4484

LENGTH:58

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05325

SEQUENCE DESCRIPTION:

GATCACGCCA TTGCACTCCA GCCTGGGGGA CAAGAGTGAA TCTGTGTCTC ACCAGAAA 58

SEQ ID NO:4485

LENGTH:115

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05326

SEQUENCE DESCRIPTION:

GATCTGGTGA CTGTNCTCTC CCTGTTTCC TTTCTTTTG GGTGTTGAG GAGCANNGCT 60  
TAGCTTGAGA CACACACAGA CACTGTGTAC TTCAGTNAAG GGCTTAATAN ACAGN 115

SEQ ID NO:4486

LENGTH:201

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05327

SEQUENCE DESCRIPTION:

GATCATTCT ATGTTGTGG GTAATCTGGT CAGTAAGATT GAGACTTAGT TAAGATTCCC 60  
CTTGGAAATT CCTTAATGTT TATTAGCTTC TAACTAGTGT TGTAAGTCCG ATGCCAGAAT 120  
TTGGAGATTG AGTTCTCTC TTTCATGGCT TTTATTCACT GTGACTAATA AGCTTCCTAA 180  
TAAATCCTTG CCAGACTAA A 201

SEQ ID NO:4487

LENGTH:274

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05328

SEQUENCE DESCRIPTION:

GATCTAGTTC GTGTATAACT GTTAACATTT TTNCTTCGTT GAATGTTAT 60

01400

2153480

CAGATTATAA ATATAGAGGC ATTTCTNCAT CCTGTTAAC GTTATTGG TAATCATTGG 120  
AGTATGTGAA AAATTTNGT TTGTTTGCT TTGGTCTCTA AGTAAACATG TTCAGCAAAG 180  
TATTTNTNT TTNAAGAAAT AAATNGNGNT TTGTATGTCC TNCCCTTAG GTTGAGGCA 240  
AAGAGGAGAT GGGAAACCAA AGGAAACANG GGNN 274

SEQ ID NO:4488

LENGTH:332

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05329

SEQUENCE DESCRIPTION:

GATCTNTGCC ATGCAGAGCA TCTTCAGAA GACCAGGACT CTGGGAGGCG AGGAGAGCTG 60  
AGCTGGGCCA CCTGGTCTCA GCCACCTGTT CTGGCTCCC CAACAGACTC TGCACTGCAC 120  
CATGGGAGGC TCCTGGGATG TTTGGAAGAA GAAACGGGCT TCTCCTTGAG GGGGTAGTGG 180  
AGGGATTTT TCCCCAGCAG TGGCCTCTGA GAGTNNTCA GTGCCTGGTG GGGCAGGGCA 240  
GGCCTCTTG AGCACCTCCT CCCTGGNTCA GGGCCTGGAT GCAGGTGCCA AGCTCTCCAT 300  
GTGGTGCATG TTNGACCCAG CCACGTGGTG AN 332

SEQ ID NO:4489

LENGTH:155

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05331

SEQUENCE DESCRIPTION:

GATCTTAACT ATGAGTAATT CACTATCAAG AGCTAATTAT TTGAAAAAAT ATAAGATGTT 60  
ATGGAGCAGA TAGCTCAAGC AGTTAAAAGA AATTNTGCAA CTNTAATTCT NTTCTTATT 120  
TTAATACTAC TACTTAATAA ATAGTATTTG CTAAA 155

SEQ ID NO:4490

LENGTH:115

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05332

SEQUENCE DESCRIPTION:

GATCAAATCA GAGATTGACA GCCTGTGGAG GGTGCTGAAC TATACAGAAC TAGACACAAC 60  
TATGTCATTA TTTTTGTAC CTACTGNTCA GAATAAAAAC ACTTGAAATA TGAAA 115

SEQ ID NO:4491

LENGTH:197

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05333

SEQUENCE DESCRIPTION:

GATCCCTCT GTGGGTGCA TGTGTAAAC ATTCTTCA ATAAACTAA GAAAATTAT 60  
TAAAGGAACA CATACTTTG GTAAATAGT CTAGACTAA AGATTGAGAA GTTACTTTCC 120

01401

2153480

ATTGCTATCT ATTGATAATT TAGACATTGA GTTCAAATTG CCTTCATTT ATGATAAATA 180  
ATGATTAAC TGACAAA 197

SEQ ID NO:4492

LENGTH:79

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05334

SEQUENCE DESCRIPTION:

GATCATTTT ATTTTGAAA TATTACCTAA CTTTACATAA ACTATATCAT AATAAACTAT 60  
TTTGCATCA CCCTTAAA 79

SEQ ID NO:4493

LENGTH:377

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05335

SEQUENCE DESCRIPTION:

GATCTCCAAG CTGAAACTTA CACGTTAAAA CTTTGCCTG TAAGAATTG CACATGAATG 60  
TTAACGGAAA ACACAAAAC TAAGATGCC CAAAACNAAA GCCACAAACG GTTCATCATT 120  
TGGTGCTTAG TCTTGTAAG GGCTCTGTG GGGTTGACTT ACTCCAGCTA CCGTTAGATG 180  
AGGGCAAATC ACCTTAGAAC ATGTTCATTT GATTCTAAC ANGGAAAATT GGGTCTATGA 240  
TTTTNGCCA ATCTTAGCCT AAAAGAAATT GCTTTAGCTT CTGGTCAGCA CTGATTAAAA 300  
TGTGAATAGT GAAGTGGCTA TCCTAAACTG GTTTATCTCC ACCCACACTA TCATAGANTT 360  
CTTAGGTAAT ACAATTN 377

SEQ ID NO:4494

LENGTH:170

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05336

SEQUENCE DESCRIPTION:

GATCAAACAC ACACACCTAT ACACATACAT ATTAANATGC AGAGGATTT AAATAATTGC 60  
AAATGTCTTG TGGCTGTTT ATTTCTACAA AATTCTGTAA GATGTATACC AGAAAACATA 120  
ATAAAAGATAA GCTCAGTTCT TCATTGGGNA AAANTATTT TAAGNNNNNN 170

SEQ ID NO:4495

LENGTH:57

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05337

SEQUENCE DESCRIPTION:

GATCTGTAAT GTGTCAAAGC ATTTTCACT TTTCAAATAA AGATACCTAT AATGAAA 57

SEQ ID NO:4496

01402

2153480

LENGTH:373

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05339

SEQUENCE DESCRIPTION:

GATCAGAAC TTGAAACAGA AGAGGTGCAA TGGAAGACAC TACGCTACTT GGTTGAGCCT 60  
GGTGAAGAAT GTATTAATGA GACTNCTTG CATAAAAATG GGAAGAAAGA GAAGACAGTT 120  
GGAGATGGAA GATGGTTTN TATATATNTN GGAACATTAG TTCCTCTGTA AGACGAAAGA 180  
GGAGAGCTAT GTTNNNTNTC ACATTGTCTG ATATATATNG TGTACCTGTC AGGTGAGTTG 240  
ATTTAGACAN CATACTGAC CTTTATGAC ANGGCAGTTT GANTAGGGNC TATTGTAATA 300  
CCCTCACACA TTATAGGGGC ATCAGAGNAT GCCCATGGNA GGGACAGTCT TACAGGGGGC 360  
TTTANGGNGN CCN 373

SEQ ID NO:4497

LENGTH:368

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05340

SEQUENCE DESCRIPTION:

GATCTGAAGA AGTTGCTGTT CTGAAACAGA AGTTGGAGCG ATGTCATTCT GCTGAGCTG 60  
CACTTAACGT AATCACGAAG TAGAGGAAAG GCTATGNAGT TGATGATTAC GTCTCAAAGA 120  
AATCCAAACA TGAGGAGGAA GAATGGACTG ATGACGACCT GGTAGAATCT CTCTAACCAT 180  
TTGAAGATTGA TTTCTCAATG CTAACTAATC AAGAGAAGTA GGAAGCATAT CAAACGTTA 240  
ACTTTATTAA ANANGTATAA TGTGAAAACA TAAAATATAT TANNCCTTN CTATTGTTT 300  
CTTTCCTTT CACAGTAAC TTATGTNAAA TAACCATCTT TCAAAAGGGC TANAANNNA 360  
ANANNTNN 368

SEQ ID NO:4498

LENGTH:150

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05341

SEQUENCE DESCRIPTION:

GATCACATCA CCTCTCTGCC TCAGTTCCC CATCTGTAAA ATGGGAGAAT AATACTGCC 60  
TACCTACCTC ACAGGGGTGT TGTGAGGATT CATTGTAAAT TTTTTTTTT TTTTTTAANA 120  
GNNTTTAAN GNNTAAAAAN CAGTNAATN 150

SEQ ID NO:4499

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05342

SEQUENCE DESCRIPTION:

GATCTCCATC ATTTCTTACA GGTTTCCTC CCTCAAGCAA TTGACATCT CAAGTGAAGA 60  
CATGGCCCCCT GAAGGGCAAT AAAGCTGCTA GTTTATTAAT ACAGTCAAA 109

01403

2153480

SEQ ID NO:4500

LENGTH:315

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05343

SEQUENCE DESCRIPTION:

GATCTACAGG NCAAAGGGAG GGAGCAAGCC CTACTCGGAT GGGGCACGGA CTGTCCACCT 60  
TTNCTAATGT GTGTTGTCAG CCTGTGCTGT GGCATAGACA TGGATGNGNG GACCACTTTG 120  
GAGACTGGGG TGGCCTCAAG AGCACACAGA GAAGGGAAGA TGGGGGCCATC ACAGGATGCC 180  
AGCCCCCTGCC TGGNTTGGGG GCACCTCAGCC ACGACCAGCC CCTTCCTGGG TATTTATTCT 240  
CTATTTATTG GGNNNNGNTG AAGAGGCATC CTGCCTGGNT GGGNCAGCCC CTTCAGCCCC 300  
TTNTNCCCTN CCCGN 315

SEQ ID NO:4501

LENGTH:157

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05344

SEQUENCE DESCRIPTION:

GATCAGACTG TTGCTTCGC ATGNTGTATG TAGTGTCTCA TGNCTGGAGT TTGCTTTGTT 60  
TTATAGTATC TGTACTCCTT GTATTTTCA AGAGCTATTT TGTAAACAGA TGATGTATTT 120  
CTCCATTGAA AACACAATAA AAAAAANCA GCACAAA 157

SEQ ID NO:4502

LENGTH:397

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05345

SEQUENCE DESCRIPTION:

GATCTAGTCT TTACTTCAG TTGTNTGTTA GGTCCATTCT GTTTACTAGA CGGATGTTAA 60  
AAAAAACTAT GCGAGCCTGA NTGANNTCTC AGCCAAATTT AGTCTTGNT CTCATCTTGA 120  
TTGGNTTAAT TCCAATTCT AAAATGATTG ANTNCACAAT AGCTCTAGGG GATGANGAAT 180  
TTGCCCTACT TTGCCAGTT CCTAAGACTG TGAGTTGTCA AATCCCTAGA CTGTAAGCNC 240  
TTCAAGGAGC AAGAGGGCGCA TTNCTCCGT GTCATGTAAT TNNNCTAAGG TGCTTGGCAG 300  
CACTCTGTAC CCTGTGGAGT ACTCAGTACC TNTGGTTGA NGTTGCTGAC AAGACCTGAA 360  
AAAAATCCCT TAAAAANNA ACCCTTAAG GTGTGGN 397

SEQ ID NO:4503

LENGTH:84

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05346

SEQUENCE DESCRIPTION:

GATCAGACTT GTTAAGTATG CCGCAAGTAA GAGCTAATTG ATTCAATTCA TGTNTGCCAC 60

01404

TAAATAAAGA GATTGAGCAA GAAA

84

SEQ ID NO:4504

LENGTH:316

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05347

## SEQUENCE DESCRIPTION:

GATCTNAACC CCAGACATCA AGGATAACAT CGTTGCTCAG CTGAAGCAGC TGTACCGCAT 60  
 CCTTNAAACC CAGGAGAGCT GGCAGCCCAT GCAGGCCACC CCCAGCATGC AACTGCCCCC 120  
 TGCCCTGCCT CCCCCAGTAAT TGTNAATGCN ATCTTCTTCC TTCTNTTTT TATAATATTG 180  
 TACATATGGA TTTTTNAGN GNTTAGATT ACCAGCTTT TAAATCTCTC TTTNNCTAA 240  
 CAGTGTAGA AGTTTGTTAGT TCTNCAAATA TGCTTAGATT TAAAGCTGNT TTGAATTTAT 300  
 GGNAAAAAAA AANAAN 316

SEQ ID NO:4505

LENGTH:218

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05349

## SEQUENCE DESCRIPTION:

GATCAAAGTG TTAGGGAAA AAAATTCCAA AAGTAGTTAC AAGCTATATC AATGTCAAAG 60  
 TAAATNCACT TCATCAAAGC TAAGAAGTCAGGAATTGT NCTCAGGTTT TTAAAAAAAT 120  
 TTNCCCTGAA TTCAGGAAGT GTCTTCTGAA TAGCAGCTAG CCANNTAAAG CGGTGTGTGT 180  
 GTACTGCAGC TGTAGGTGAA CTTAAAAATA ATAATAAA 218

SEQ ID NO:4506

LENGTH:297

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05350

## SEQUENCE DESCRIPTION:

GATCAGCCAG TTACCTTCTC CATTGTNTTA GTTCTGTCAC CCATTCGTC AAGTGACCTC 60  
 TCATCTTCTA TAAACTAATA CAGGAATTCT TTCCAAAGCA ATGTCTAAAA ACTCTTTTT 120  
 TTAAAGTAAC AGTTGGTAT GTTTATTGTA GATAAAATNAT TTTTNAGGCC TTCATTTAG 180  
 CTAAGTTAG AATTNATATT AGGCANCTAT GATTGAGTG GTTATNCATT GAGTAANTTT 240  
 CCACTATAAA GAATTTNATT GANCANTTGT TAAAGNATNN TGGTAATGCA TGGNCAN 297

SEQ ID NO:4507

LENGTH:322

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05351

## SEQUENCE DESCRIPTION:

GATCAGAGCA CTGAGAACT CCAGAGGCTT CTGGTTCACCC GCCCTGATTG CACAGATGTG 60

2153480

GGTCAGAGGC AGAGATGGAA GTTGAATGG ACAAGCCTGC CCTCTCCTCA GCTCTCCATG 120  
GCTCTGTCTT CAGGCTGTT CTGCAATTG ACATGAGGCC TGGCCCCAGG GAAACCAGTG 180  
GGGCCTCATC TCCTCCCTGT GCTGCTCTGA GGTGGAGCCT TCTNAGGGTC AGTCCAGCTC 240  
TGGAGNCCT CTCCAGCTCG GTCACCAAAG CTGTCTGGTC CCAGGGCGGT GTGGAGTGAC 300  
AGGCACGGCA GCCAATNCN GN 322

SEQ ID NO:4508

LENGTH:137

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05352

SEQUENCE DESCRIPTION:

GATCGCGCCA TTGCACTCCA NCTTGGGTGA CAGAGTGAGN CTCTGTCTCA AAAAATAATA 60  
ATAATNAATT AATTAATTA AAATAAAAATA AACAGTGGGT TAGTTATCTC AAAAGTGGC 120  
TTGTTATAAA ANCNNGN 137

SEQ ID NO:4509

LENGTH:285

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05353

SEQUENCE DESCRIPTION:

GATCATAAGA CTGTCATGTA AGAGGTGCTC TCCTGGCACC CAGAGAAAAG GAGCATCCTT 60  
ACCTCCAAAA GCACAGGGAC ACAAAAGAGGA ATCTAAACAA ACAGGCCTCT NAGTTTCCCC 120  
CAGTTTATTA CATTTAGCTT GTTCACACTT TGCCCTATGA CATTNCTACA TCACTGGNTG 180  
CTCTTCATCA AACCTACTAT AANNNNCATT CAAGTTCAAC TGTTTCTTG GGCCTTNNTT 240  
NNCTTATGGA GGCCCTCGTG TCGTGTAAAA CTTNTATTNG GTNAN 285

SEQ ID NO:4510

LENGTH:327

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05354

SEQUENCE DESCRIPTION:

GATCAGCAGA GTGGAGGTG AGGATGTTGG GATTATTAC TGATGCAAG CTCTACAAGT 60  
CCCGGTCAACC TTGGGCAAG GGACACGACT GGAGATTTAA CGAACTGTGG CTGCACCATC 120  
TGTNTTCATC TTGCGCCAT CTGATGAGCA GTTGAATCT GGAACGTGCCT CTNTTGTGTG 180  
CCTGCTGAAT AACTTCTATC CCAGNGAGGC CAAAGTACAG TGGAAGGTGG ATAACGCCCT 240  
CCAATCGGGT AACTCCCAGG AGAGTGTAC AGAGCAGGAC AGCAAGGACA GCACCTACAG 300  
CCTCAGCAGC ACCCTGACGC TGAGCNN 327

SEQ ID NO:4511

LENGTH:194

TYPE:nucleic acid

TOPOLOGY:linear

01406

2153480

CLONE:HUMGS05355

SEQUENCE DESCRIPTION:

GATCCTCCAC TCCAGAGCAC CTGAGAAGGC CGGGACCAGA GGCCCTGTGT GATGTGTACT 60  
CCGCAGCTGT TTGGGGTGGG ACATTCTGT ACTTCTCGAT TTGCTTATGG CTCAGCCATT 120  
ACCTGTGTCA GTCCATGATT CTGTTGAAC AGTTTAAGA GTAAATAAT AAAGCTGCCT 180  
GATGTCCCCAT CAAA 194

SEQ ID NO:4512

LENGTH:106

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05356

SEQUENCE DESCRIPTION:

GATCACTTTT CCCTGTCTAA ACTCCAGGNT ACAGTATCCA ATANATCAA ACAGAACTCT 60  
GGTGTCAAAG TGTAANTAAAT NGTGTAAAAT AGCCTTCCCA AGNTTN 106

SEQ ID NO:4513

LENGTH:89

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05357

SEQUENCE DESCRIPTION:

GATCTCACCA CTGTACTCCA GCCTGGNTGA CAGAGCGAGA CCCAGACTCA AAAAATAAAA 60  
ATAAAAACCC TGAATATCTT CCTTCTAA 89

SEQ ID NO:4514

LENGTH:366

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05359

SEQUENCE DESCRIPTION:

GATCTCTATA CCTCAGCTTC TTCATCTGCA AAGTGAGATA ATTGTACTAT TCTACTTCC 60  
TCATAGTGCGN NTTATAACAG ATTATGATAA TATTACAAAG TACTTAATAC TTGGCATATA 120  
GTATATATAT NANCTATTAG TATTITGCAA TTGGGGATA TTGAAAATTA GAAATTGCNT 180  
GTTAGTTCAT GCTGCACTAC CATATTGTCC TTTGGGGCT CTTCAATGGG TGAAATTCCA 240  
TTTNACAGTT TATCATGTGC ATCTGTATCA CAGGNGTATT TTGGCAAAAT GATTCTGTNC 300  
AAAAAAGGAG TACTATANN NGNGGGTGCN AAATATATTG AGTCTNTTAT GGGGAAAANA 360  
AATTN 366

SEQ ID NO:4515

LENGTH:313

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05360

SEQUENCE DESCRIPTION:

01407

2153480

GATCTCTGGT AAAAGAAC ATCTGAGAAA ATTNCTTGTT TTTAGGAACC TGTGTACATT 60  
CATACTTAAT TCTNCCAATN ATGCCTTCGA GTTTTTGGA TTAACACTCA AAAGTAACAA 120  
GTCCTCAAAA TTAGGTTGT CCTGTTGTT TAAGTGGACC TTTGGCAAGA GATTCTAGT 180  
GAAGCTTGAT TCTNAGTACT TTCCTCATGT ATAAAAAAGA GGCTGGAGGA GGGAACCTGG 240  
GACGTGGAGA GTGAGGGAGT ATAGCCTGAG GTTCTTGTT TGCCAACCTG GGGAAACCT 300  
GTCTCTACTT AAA 313

SEQ ID NO:4516

LENGTH:73

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05361

SEQUENCE DESCRIPTION:

GATCACTAAA CTATCTCCCC TCTTGCTGAA GTTCTTGTA GTAATAGCTC ATAAAAAATT 60  
GTTTATTAAT AAA 73

SEQ ID NO:4517

LENGTH:247

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05362

SEQUENCE DESCRIPTION:

GATCTTTAA AAAGAGATTA AACCGAAGTG ANTTAAAAGA CCTTGAAATC CATGACCGAG 60  
GGAGAATTGC GTCACTTAAA GCCTAGTTAA CGCATTNCT AAACGCAGAC GAAAATGGAA 120  
AGATTAATNN GGAGTGGTAG GNTGAAACAN TTTGGAGAAG NTAGAAGTTT GANGTGGAAA 180  
ACTGGANGAC AGAAGTACGG GAAGGCGAAG AAAAGANTAG AGAAGATAGG GAAATNGAA 240  
GNTAAAN 247

SEQ ID NO:4518

LENGTH:95

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05363

SEQUENCE DESCRIPTION:

GATCGCAGAA CATACTGTAT TTNACTATA TCTTTTTTT TAAATCTGAC AAACTTTTT 60  
NCTTNATTN NAATTGACAT AATTGTACAT ATAAA 95

SEQ ID NO:4519

LENGTH:134

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05364

SEQUENCE DESCRIPTION:

GATCTGCTTT GGAAATTAAT TGCCTCTAAT ACATACCTAA GTAAACATAA CTTAACACC 60  
TAAGTAAACA TAACATTACT TGGAGGGTTG CANTNTCTAA GTGAAACTGT ATTTGANACT 120

01408

NTTNAGTNTA CTTN

134

SEQ ID NO:4520

LENGTH:269

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05365

## SEQUENCE DESCRIPTION:

GATCTGGCAC TGAGCTTTT GTCACTGAAC CTTCCCGATG CCAGCTGGGC TCTTGGACTC 60  
 CCCCTTCCT CAAGGGTAGA TGAGAGGAAC GATNNNTAGA GGTTGGCTGT GGGTCCCTGGG 120  
 TACCACCTTC TGAGCCTCAG TTTCCATC TGAAAGTGG GGAGAAAAGT CTGTTTGCT 180  
 CAGGAGTGTG AGGACTACAC TAGTGAAAGC NCCTGGCGGG CAGCCGGCGA TGCCCAATAA 240  
 ATGTGTGNTT TGCTCTTGT TAAGTGAAA 269

SEQ ID NO:4521

LENGTH:189

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05366

## SEQUENCE DESCRIPTION:

GATCAGTTG TAATTTTTT NCTCCTTGAA GGACACAAAT AATTGGTTT AGGTATGTAA 60  
 AACACTAGAG GTCAACCTTA CATAGTATAT AGAACTNATG GGTTTACCCA GCTACCCAGT 120  
 AGCATAACTT TNACACAGCTC GGGGATGAAT TAACATGGCT GAAATAAAAC TAAAAGTATG 180  
 GTTTTNAAA 189

SEQ ID NO:4522

LENGTH:79

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05367

## SEQUENCE DESCRIPTION:

GATCACAGTA CACCATATGC ACTCTGGTAC CTTAATTTT TTTTATAAAT AATAAAAGTG 60  
 AATATTGAAG CTTCTTAAA 79

SEQ ID NO:4523

LENGTH:255

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05368

## SEQUENCE DESCRIPTION:

GATCTGTTGA ATTTGGGAAG CCTCCAGTTT TAATAAAATT TTTTTATTAT GGTGGAAACN 60  
 TGTCTGTAAA NCTTAGGACT ATAGAAATGC AAAGAATAAA GANCTGAGGG AGTTACACAC 120  
 ATTTGTAGTC AGAAATTAAAG TTCAAAANAT AATTAGGTC ATTTGCATT TTTAGTATGC 180  
 AAAATAAATG GAAAANTAA NGTGCAATAN ANNTATAATT NGGGAAATGA ATGCAGTAAA 240  
 NTTGANAACA TTGAN 255

2153480

SEQ ID NO:4524

LENGTH:51

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05370

SEQUENCE DESCRIPTION:

GATCTGTCAG GGCCACTTAG TGATAATAAA TTCTTCCCAA CTGCAGACAA A

51

SEQ ID NO:4525

LENGTH:353

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05371

SEQUENCE DESCRIPTION:

GATCCGCATC GACTTGGCCG TGGCGACGT GGTCAAGACC TGGCGTTCA GCAACATGCG 60  
CCAGTGAAT GTCAACTGGG ACATCCGGCA GGTGGCCATC GAGTTGATG AACACATCAA 120  
TGTGGCCTTC AGCTGCGTGT NTGCCAGCTG CCGAATTGTA CACGAGTATA TCAGGGGCTA 180  
CATTTCTTG TCGACGCGGG AGNGGTCCC 6 AGGGGAGGAG CTGGATGAAG ACCTCTTCCN 240  
GCAGCTCACCC GGGGNCATG AGGNCTTCTG AGGGCTGTTT GATTGCCCT GCCNTGCTNA 300  
ACAAACCTGTN ACAGGCACCTT CCAAGGCCAG AACCACAGGG GCTNACTNTC GAN 353

SEQ ID NO:4526

LENGTH:174

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05372

SEQUENCE DESCRIPTION:

GATCTGGAAT AATTATGGTA AAATAATAGT ATTTGCTAAG ACTAGATGAT TGGTGTACTG 60  
GATTTCATCC GCTATTTCT AAGTTGTTA TGAACGCTTA AAATATATAT GTATGTAGTA 120  
AAATTAATGT AAATTTGTAC AAATAAAAAT AAATGGCATG TGATATATGG CAAA 174

SEQ ID NO:4527

LENGTH:201

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05373

SEQUENCE DESCRIPTION:

GATCATGTGT TTGGGGCTT TTAGGGGACC CAGCTGCACT GGGGCACTGC CCGTGGCCTG 60  
GGTAGGACAT TTCCCAGCAA GGGCTGGAGG AGTTGCCGTG CCTTCAGCCT GAATCGAATG 120  
TCAGAACAG CCAGCGGTGC TTCACCCCT TGGGATAAC TTGCTTAGTT TTTTAATAAA 180  
TGTTCCCTGGT TGGTTTCAA A 201

SEQ ID NO:4528

LENGTH:308

01410

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05374

SEQUENCE DESCRIPTION:

GATCTATGAA GCCCACCAAC AAGGCCGAGG GGCTCTGGAG GCATTGCTAT GTGGGGGACC 60  
CCAGGGGGCC TGCTCAGAGA AGGTGTCAGC CACAAGAGAA GAGCTCTAGT CCTGGACTCT 120  
ACCCCTCCTCT GAAAGAACGCT GGGGCTTGCT CTGACGGTCT CCACCTCCCGT CTGCAGGCAG 180  
CCAGGAGGGC AGGAAGCCCT TGCTCTGTGC TGCCATCCNG NNNGGNTCCT CCAGCCTCAG 240  
GGCACTCGGG CCTGGGTGGG AGTCAACGNC TTCCCTCTG GACTCAAATA AAACCCAGTG 300  
ACCTCAAA 308

SEQ ID NO:4529

LENGTH:194

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05375

SEQUENCE DESCRIPTION:

GATTTCTGTA GCTTGTTCCT CGCTGGGTG GGACAGAGGN CAAAGGGAGAA GGGAGGGTCT 60  
AGAAGAGGCA GCCCTNCNTT GTCCCTCTGGG GTAAATNAGC TTGACCTAGA GTAAATGGAG 120  
AGACCAAAAG CCTCTNATTN TNAATTCCA TAAAATGTTA GAAGTATATA TATACATATA 180  
TATATNCCTN TAAN 194

SEQ ID NO:4530

LENGTH:314

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05376

SEQUENCE DESCRIPTION:

GATCTTGATT GATAACTGCC ATGATATTTT GCTTGATGT GTTTCTACAT GTGGTTGCAC 60  
ACGGTTCACT AAAATAATG CTGCTATCGA GTATGCAAAT ATTGAAGTAT GATGGTTGA 120  
CTGTATGGNA GTGTTGTAGC AGCCTCTGT TTTTTCCCC ATTGCCTCTT TTTTTAAAAA 180  
ACTTATAAAG TCACTNTNA TTTNCCTCA GTCTTCATG ACGAGAGCAA TATTAAGANG 240  
ACATTGCTAT CTAATNNNA ATCTTNTAA ATGAAAAATT CCTATGTTCA GTAGCGTGGT 300  
TGATGCTATT GTGN 314

SEQ ID NO:4531

LENGTH:182

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05377

SEQUENCE DESCRIPTION:

GATCGAGTCAGC GCATAAAATTT CTAAGTCAGC CTCTAGTCGT GGTCATCTC TTTCACCTGC 60  
ATTTTATTTG GTGTTGTNT GAAGAAAGGA AAGAGGAAAG CAAATACGAA TTGTAATATT 120  
TGTACCAAAT CTTGGGATT CATTGGCAA TAATTCAGT GTGGTGTATT ATTAAATAGA 180  
AA 182

01411

2153480

SEQ ID NO:4532

LENGTH:314

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05378

SEQUENCE DESCRIPTION:

GATCATGAAA CTGGTTCTG TTTTATGCAG TTGTCATTTG TAAAGNCTAA TAAAATATNC 60  
TCTATAATTN CTTCTAGATT ACAAAAATAT GACAATCTG TAAGTAGCAG ACTATGGAGA 120  
AAAATGAGTT ACCTGGNGGG TCAGGTAAC TGCCTAAACTN AAANGTNGT TAGTGAGGC 180  
AAAGTCCTAA GCAAGGTTGT GCTATCANGG CTCAGCATACT CTTCGTGGGC CTTTGANTTA 240  
CCANCACTGG AANTGCCTGC CANCTAATCT GGGGTAGATT CTTTAAGGCA TTCCACTTAG 300  
CTTGCCAGTT GNGN 314

SEQ ID NO:4533

LENGTH:311

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05379

SEQUENCE DESCRIPTION:

GATCAACTAA TAGCTCTGCT AGTAATTGAT TTATTTNCT TCAATAAAGT TGCATAAAC 60  
AATGACTTAG CTGCCTGGAT TAATCAGTAT GGGAAACAAT CTTTGTAAG TGCAAAGCTG 120  
TTTTTNGTAT ATACTGTTGG GATTTGCTTC ATTGTTGAC ATCAAATGAT GATGTAAGT 180  
TCGAAAGAGT GAATATTG CCATGTCAG TAAAGTGCA CAGTCTGTTA CAGGTTGACA 240  
CATTGCTTGN CCTGATTAT GCAGAATTAA TANGTATTT GGATAGTGTG GCTTTAATGT 300  
GCTGCACATG N 311

SEQ ID NO:4534

LENGTH:330

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05381

SEQUENCE DESCRIPTION:

GATCGGAGGA CGACCCGAGT CCCAAGAGTG GGGTTTGCT TTTTAAAAGG AGAGAGGAGG 60  
GGTGATGGCA GGGGAGTGGG GGGTGGCCGG GCAGGTCTG CCGGCGCAGG GAGCCCTCTG 120  
CCCTTCACAC TCTCCTCCAA AAGAGCCTCC ATCTGTAAGG AAGCAGGTCT CCGCGAGGGG 180  
TTCTTTCCA TGTNTTTCC TCCTGTNGTT TTAGAACTTT TTNGAAAAAA ACNGNCTCG 240  
TTTAGATTATAGCATTGA CTTTACACA CATTACACACA AGANAAAAAT CCTTNCAAAA 300  
TCCTTAAANT NNCTGGTNC CNNCTTNNN 330

SEQ ID NO:4535

LENGTH:204

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05382

01412

2153480

SEQUENCE DESCRIPTION:

GATCTCAGCT CCCGTTCCCC AAGCACACTC CTAGCTGCTC CAGTCTCAGC CTGGGCAGCT 60  
TCCCCCTGCC TTTTGCACGT TTGCATCCCC AGCATTCCCT GAGTTATAAG GCCACAGGAG 120  
TGGATAGCTG TTTTCACCTA AAGGAAAAGC CCACCCGAAT CTTGTAGAAA TATTCAAAC 180  
ANTAAAATCA TGAATATTTT TAAA 204

SEQ ID NO:4536

LENGTH:136

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05383

SEQUENCE DESCRIPTION:

GATCACTTGG AGACTCTTT TTTGCTGGTT TCTAGATAAC TCAGGTAAT CAGACCTTA 60  
CAGAGTACAG GGCTAGGTGA NAGANTTACT GANAAATCAC CTTGAAAATC CGANGGGCTG 120  
ATATACCCTT NNTGTN 136

SEQ ID NO:4537

LENGTH:87

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05384

SEQUENCE DESCRIPTION:

GATCTATGCT GTGTTGCTT ATTCTTAGT TGAACACACT ATGAAGAATT CCAGGTGTAC 60  
TAGTGAATGT AATTTATAGT TGCCAAA 87

SEQ ID NO:4538

LENGTH:305

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05387

SEQUENCE DESCRIPTION:

GATCGACAAAC GAGGCCCTCT TCAGCTGCGA GGTCAAGCAC CCAGCTCTGT CGATGCCAT 60  
GCAGGCAGAG GTCACGNNTGG TTGCCCCAA AGGACCCAAA ATTGTNATGA CGNCCAGCAG 120  
AGCCGGGTA GGGGACACAG TGAGGATTCT GGTCCATGGG TTTCAGAACG AAGTCTCCC 180  
GGAGCCCATG TTCACGTGGA CGCGNGTTNT GAGCCGGNN NNNGGACGGN AGCGCTGAGT 240  
TCGACGGGAA GGANTTGGT GCTGGAGCGG TTCCCGNCG AGNTCAATTG GCTCCATGTA 300  
TTNGN 305

SEQ ID NO:4539

LENGTH:106

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05388

SEQUENCE DESCRIPTION:

GATCATAAAA TGAATTCTTT ATTGTATCTA CACACTCCAC ATTCTTACT GTGTCTACT 60

01413

ACTGTATCTT GGCTCCANTG CTGTATTAAC CACCATCTTA AGCAAA

106

SEQ ID NO:4540

LENGTH:167

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05389

SEQUENCE DESCRIPTION:

GATCCTCCTT TGCATGCAAC TGTAGCTGCA TTTAATGAAT AGTTTGAAACC CTTGTNAATN 60  
 CATTTTTNA AAAAGAAAAGA AAAAAAAAAC TTCGTGTATG NAACTCAAAG CATGNAACCT 120  
 TAAGATGTTG CATTCTAAC TNACANTAAA GACCTTTCCC AANTAAA 167

SEQ ID NO:4541

LENGTH:111

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05390

SEQUENCE DESCRIPTION:

GATCCATAACG TGGCCGCACC CACACAGCAC GTGCTGTGAC NGATGGCTGA ACAGGAAAGTN 60  
 TACACTGTTC CTGAATATTG AAATAAAACA ATAAACTTTT AATGGTANAA A 111

SEQ ID NO:4542

LENGTH:216

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05391

SEQUENCE DESCRIPTION:

GATCAGTTCT GCAAGATGCC CATCAACAAC AAGATGGCCC AGTGGGGCAA CAAGCCTATA 60  
 TGCTGAGCAG GAGGCAGACT TGCAGAGCTT GTTTGTTC ATCCTGTCCG TAAGGGTCA 120  
 GCGCTCTTGC TTTGCTCTT TCAATGAATA GCACTTATGT TACTGGTGTCA CAGCTGAGTT 180  
 TCTCTTGGGT ATAAGGCTA AAAGGGAAAA AGGAAA 216

SEQ ID NO:4543

LENGTH:103

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05392

SEQUENCE DESCRIPTION:

GATCGAAAAT AGTTGGAAAA AAGAAGAAGA GTTGCACTC TACTGAACAT GTACAGACTT 60  
 TCTTCTTCTT ATTATTCCCT AAACAATACA GTGTAAAAC AAA 103

SEQ ID NO:4544

LENGTH:194

TYPE:nucleic acid

TOPOLOGY:linear

2153480

CLONE:HUMGS05393

SEQUENCE DESCRIPTION:

GATCAGAAC A NTNCAAAAAA TTCACACCCC CAAAAAAAGNC AAGCTATTAT ATGGCAATT 60  
CGTGATAAAA TATTGATCCT ATTTCCTG CATTCTAAT TTTCCCGTAA CTAGACACAT 120  
CAGTTTATA ATTAGGGNAA AAATACCTTN TAAAAGTAAA GCGAGCANAG GTTTCNNNTG 180  
CANTGTTCAT TCCN 194

SEQ ID NO:4545

LENGTH:108

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05394

SEQUENCE DESCRIPTION:

GATCTGGTAG GTTGCAGCAG AGAAAATAAA TGTGACTTGN GAGNCCACTC AGAGAGGGTC 60  
CAAGGGTGAT GGAGAAGGAA GCATGGCCTG GNAGCTTGA AGGNANGN 108

SEQ ID NO:4546

LENGTH:266

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05395

SEQUENCE DESCRIPTION:

GATCTGCTCT TGCAATGCC TCACCATCTG GNAGGAGCGA GGCGGGCCA TCGTTGGCAA 60  
GGGCCGAAAG GAGTCAGCGC ANCCCTGCC CACCTTNAG CAGGACCTCA CCTTGGCTCT 120  
GTTGCTGTCC TCCAGGGCGA GCACTTCCA CTTCAGAGG GGGCCAGAGG GACTTGCCT 180  
GCCCGAGTCT TGGAGAGCTC AGTACAGGGC AGGAGCTGCT GTGGTGTCC CTTGGCAAAT 240  
NAAAGTTTA TTTTCGTTG GGNAAA 266

SEQ ID NO:4547

LENGTH:72

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05396

SEQUENCE DESCRIPTION:

GATCTCCGTG TGTGCATGTN ACTGTGCTGG GTTGAATGT GAACAATAAA GAGGAATGTC 60  
CAAGTGTCA AA 72

SEQ ID NO:4548

LENGTH:104

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05398

SEQUENCE DESCRIPTION:

GATCATGGGG GTGGATTCT TATGAATGGT TTAGTACCAT CCACCTTGTA TTGTCCCCGT 60  
GGTAATGAGT GAGTTCTAA GAAATCTGGT CATTGAAAAA TAAA 104

01415

2153480

SEQ ID NO:4549

LENGTH:74

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05399

SEQUENCE DESCRIPTION:

GATCTTCACA TCTTGGACCT TNGTCAGTT TGCTATTCA TATTAACAC TAAAACCTTG 60  
GCGGTTNTTG CAAA 74

SEQ ID NO:4550

LENGTH:292

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05400

SEQUENCE DESCRIPTION:

GATCTGAAAT CACATCCAGC TCCTGATGTT TTCTTCTCCC TCTGACTGCA GAGGAAGTGT 60  
TCCTTACCTGC AGGAAGGCAC CTGTCACACA GGGCGTTCAC TCAGACCATC TGTGCTCTGC 120  
CCTGAGTTCA GTTGAGAAAAA TCCTATTATC AAATTTGGNT TTCCCTGGCCC CAGAACCTCC 180  
CAAAGACCTG TAAAATGGAG GGATTTACCA CCTCACATAT GTCCAGTTAA ACAGTTGTG 240  
GACTTGTAAAC CGTCGCAGCC CANTGGTACA ACAGTAGTTT AATCACGGGA AA 292

SEQ ID NO:4551

LENGTH:265

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05401

SEQUENCE DESCRIPTION:

GATCGGATGG GCAAGTCCT GCCAGGGTCT CCAGATGGCA ATGGAAGCTC CTCCCTGCC 60  
CACTGGGAGT AGCGGCTAAA GCTGGGGAT AGAGGGGCTG CAGGGCCACT GGAAGGAACA 120  
TGGAGCTGTC ATCACTCAAC AAAAACCGA GGCCTCAAT CCACCTTCAG GGCCCGGCC 180  
ATGGGCCCCCT CACCGCTGGT TGGAAAGAGT GTTGGGTNGT TGGCTGGGGG TGTCAATAAA 240  
GCTGTGCTTG GGGTGCCTN GGAAA 265

SEQ ID NO:4552

LENGTH:173

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05402

SEQUENCE DESCRIPTION:

GATCTATGCT CTTTCAAATG GAGACTGGGA TATTGTTGTT TTAAGACCAC TGTTTCCCTG 60  
TTCCCTCCA AATNTTAGTC ACATATATNA TTACCCCTAA GTTGGTCACT ATCTATCTAT 120  
CTGTCAATAA TTCAGGATTA AAGTTGAAG TGTAATTACA TTGANTTT AAA 173

SEQ ID NO:4553

01416

2153480

LENGTH:270

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05404

SEQUENCE DESCRIPTION:

GATCGACCAAG CAGGTGGTCT ATATCCATCC TTCCAGTGCC CTCTTCACA GACAGCCAGA 60  
ATGGGTNGTG TACCATGAGC TNGTGCTCAC CACCAAGGAA TACATGCGTG AAGTTACCAC 120  
CATCGACCCCT CGGTGGCTTG TGGAGTTGCC CCCAGCCTTN TTNAAGGTCT CAGACCCANC 180  
TAAGCTAAGN AANCAGAAGA AGCANCAGCG TCTTGGNACC GTTGTACAAAC CGNTATGAGG 240  
ANCCCAATGN CTGGGAGAAAT ATCTCGGNGN 270

SEQ ID NO:4554

LENGTH:333

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05406

SEQUENCE DESCRIPTION:

GATCGGGTTG AGCCCAGGAG GTTGTGGCTG CAGTNAGCTG TGATGTGCCCTTATGCTATA 60  
GCCTGGGCAA GAGCGTGAGA CCCTGCTCA AAGAAGAAAA AAAGAGAAAA ATAACCTTTT 120  
TGAACAAACA GNCAAATTAG CTAGTAGTAT GGAGATGTAT ACCCTCTATT ACACACATAA 180  
AACCGTAACA AAATTCAATTG NGGTGTATTA TAGTTAGTTT TGTGAATAGA GAAATAAAGC 240  
ACTGATGNTT AANNTTGGTT ACAGTGACTT TTAGAAGGGN TTNNNTGNTG GTTCACATTN 300  
GTCAGAANTT TTTTCCNNC NNGGCTGGTT CAN 333

SEQ ID NO:4555

LENGTH:250

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05407

SEQUENCE DESCRIPTION:

GATCTCCCCC TTCCCTTNGG GGGCACAGCT GGCTGGGCC TCCAATCCTG CGGANTTCC 60  
TGGGTGTGGC TTTGACCTCA GAAGTGGCTC TGTTTGGCC TCAGGAGTGT GGCTGGCCC 120  
AGCCTGCTGC AGCCTCTGT GGNGGGCCCT TNATGCCACT AATCCCCNGA CCCCCCGGAT 180  
NTTNCAAACT GNACAGACAC ACGNATTGTT AAGGCCGCTT ANGGCTCCA GCGTGCACTC 240  
TTNTTTANGN 250

SEQ ID NO:4556

LENGTH:211

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05408

SEQUENCE DESCRIPTION:

GATCAATGCA NCGACGTNGG GCTCATGGCC TACCTCGGCA CCATCACCAA AACGNGCAAC 60  
ACCATGAACC ATTTTGTGAA CAANTCAAT GTCCCTACG ACCGACAAGG CATCGGCAGG 120  
AGAATGCGCG NGCTCTNTTT CTGATGAGGG TACTTGAAGN GGCTGATGGA CAGGGTCA 180

01417

NGCAACTATC CCAAAGTGG A GN GCACTACA N

211

SEQ ID NO:4557

LENGTH:308

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05409

SEQUENCE DESCRIPTION:

GATCTTTTT CCATTGGTT AACATTTAAC TCCATGNCAG ACCTTGTTC AACCCCTCTC 60  
 ACATCATGTT CTTTCCTTT TTGCGAGTTA TTTGCATTA ACCAACTTTG TCAGTGACAG 120  
 ATGCGTATCT GAGGGTGTCA CACACGACCN TCAGCAGGGA AGACTTCTGG GCCATGGAGG 180  
 GCCGTCTAAT ACATGGACTT ATAAACTGAC TGCNTGGCA ATGAAAAGGC CAAATTATTC 240  
 TGAATTTTT TNGAATCACT GTAAAAAAAC TGATTNTTN NTGTATAGAG ANCCTTAAA 300  
 CGGTGGAN 308

SEQ ID NO:4558

LENGTH:175

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05410

SEQUENCE DESCRIPTION:

GATCCAGCTG GCTCATCCCA GCCCAGGTGG GCCAATTATT CAATTTNAA GAATTTGTT 60  
 GCAAGCCAGT TGTCAAACAC AGCCATTATA ATTATGTAAA TTGCAANTT ATGTTAAAAA 120  
 CAAGGACAAT AAATATTCAA AATGCATCCC TAATTACTAC ATTTGACCAC GNAAA 175

SEQ ID NO:4559

LENGTH:178

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05411

SEQUENCE DESCRIPTION:

GATCTTNACA ACTGTTTAAT CAGTTTATT TTTGTACAGT ATTAGTGACC TAAGTNATT 60  
 TGCTGTCCCC TTGTTGTAAGA TCAANTGAAA NTATAAAAGA GGCTTGTGAC AGTAGGTATT 120  
 TTGTACATAT GTATATATGT TGTCAAATA AAATTAATAA ANTGGTNAAA GGCTGAAA 178

SEQ ID NO:4560

LENGTH:77

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05412

SEQUENCE DESCRIPTION:

GATCTTCAGC ATCTTTACT TTCACCAGCG TTTCTGGGTG AGCAAAACA GGNAGGCCAA 60  
 ATGCCGCAAA AAAGAAA 77

SEQ ID NO:4561

2153480

LENGTH:203

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05413

SEQUENCE DESCRIPTION:

GATCCCAGGA ATATTGAAA TNTTCTAACT TTACTCTGCA TTTGTATAT CTGGCCTCTA 60  
TTGCCCTTGA AGGTGAAGAT GAAACTGTCT TTAGAAGATA TCTCTTGAT TCTGTGATAG 120  
AAGTCCCTCA CATCTTGAT TAATTTATG TATATATCAA CGGTGGTTGG TCTTTAAAAA 180  
AATAAAATCAA AAGAATANGT AAA 203

SEQ ID NO:4562

LENGTH:352

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05414

SEQUENCE DESCRIPTION:

GATCAACCCA CATTAGAGTG TCTAAGGACT CCTGAGAATT CCTGTTACAG TAAACAAAAC 60  
TAACGTAATC TACCATTCG TACACTATTT GAGCATGGAA ATCATAGTCC CCACTCTGTG 120  
AAAACCTAAC GCTTTTGGGA AGACATTTCT GTAGCATGTC AGTTTGGAGA AATGATGAGC 180  
TACGCCCTTGA TGAAAGAACCGTGTGGTGC TGCTAAGTT AGCCATTATG GTTGNGCN 240  
TTNTCTNTCT TAAGGCCCTA TTCTTCAAC TAAAAAGNTG GGGGATTNAG GNGCCAAGGN 300  
AGNTTGGGGGGGGGGNTNNTG NAAATTAANT TTTNTTGAGG GGTNGGCNTA GN 352

SEQ ID NO:4563

LENGTH:210

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05415

SEQUENCE DESCRIPTION:

GATCCGCAAC CTGGACCCCA GTGAGAGGCG GTGGGCTGAC TGGGAAGNAG AGGCCCCCAA 60  
CCTACTCAGG ATTNACCGT GTGAACTAGG CTGCCGTGG GGTGCCCTT AGGCTTGGAG 120  
AGCCCCAGAT TGGAGGCAGA CAGACTGCAC CACCCCTTCC CCCCTGCAT CTCAAGAATA 180  
AAGCAAGCTG CCTTGTACT TGGTTGNAAA 210

SEQ ID NO:4564

LENGTH:74

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05416

SEQUENCE DESCRIPTION:

GATCANATAG TTGCTGTTT GTAAAATGTA ATGTATATNT GGTTTAAGT AAAATAGGGC 60  
ACCTGTTCA CAAA 74

SEQ ID NO:4565

LENGTH:303

01419

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05417

SEQUENCE DESCRIPTION:

GATCCAGAAA CTGAGAAGCT TATCCGAGAG AAAGATGAGG AGCTGCGGCG GATGCAGGAG 60  
ATGCTACACA AAATACAAAA ACAGATGAAG GAGAACTATT AACTGGCTT CAGCCCTGGA 120  
TTTAAATC TCCTCCTCTT CTTCTGTCC ATGCCGGCCC CTNCCAGCAC CAGCTCTGCT 180  
CAGGCCCTT NAGCTACTNC CACTTCGCT TACATCCATG CTGACTGNCN AGAGACTNAN 240  
GNGGCANTAA AGTTAATAA ATCTGTAGGT GGCNNNAGA AAAAGAAAAN AACAAAANAA 300  
AAA 303

SEQ ID NO:4566

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05418

SEQUENCE DESCRIPTION:

GATCGTGT TTAACTTTTC TTTTCCTGTT TTATTTTG TATTAAGTCG TTGCCTTTAT 60  
TTGTAAAGCT GTTATAAATA TATATTATAT AAATATATNA AAAAGGAAA 109

SEQ ID NO:4567

LENGTH:303

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05419

SEQUENCE DESCRIPTION:

GATCTGGAGG CAGCAGTGT GGATGGAATT GTCTAGGCTG TGGCATGTTG GTTTGTCTT 60  
TCTTTCTCC TTTGATTATG TAAGAGCTAT TTCATTATAA CTTATTATGG TGATTATACA 120  
GGCAAGAAGA CAAAAGGAG AGAAAATGTA CCTCTTCTAC TGGATAATG TTTATGATTA 180  
CAAGTGAGAT AAGGTATTT NATCAATATG AAGGCAACCT TGGCTGATAA AACCTCTATA 240  
GTGAATACTC ACATCTTNA CTTCACTCAC TATCAATAAT AAATATATTN NCTGACAANG 300  
AAA 303

SEQ ID NO:4568

LENGTH:230

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05420

SEQUENCE DESCRIPTION:

GATCTCTTT GTAGAGGATT TCAATGTATT TCTTTATCAT TTGAGTGTGT GTGTGATGGA 60  
CGAATATGTG TGTGAGTTG AGAACATAT CGTCGTGTC CAGTTACTTT GCAAATTGT 120  
GGACATTTGT GATTGGACAG AGGGGTTTGT GCTGTGGCCT AACACTTGCC AAGTGAGGTG 180  
TAGGTTATGC CTATATGCAA ATTAAACTTC ACCTTTCTG AATATTCAA 230

SEQ ID NO:4569

01420

LENGTH:355

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05421

## SEQUENCE DESCRIPTION:

GATCCCCAAT TGACTCAGAG TTTGAGGAGT TAGTATCACA GAATTAGATT TTTTTAAAGC 60  
 ATTTGTACGT TTCCATTCCTT AAATATGTAG CTGTGGTTCT TGAAAACACA TCCTACATTG 120  
 CATATGGGCA TAGCAGTTTG TGACCCAGGC AGAATAAGTT AATATTTAAT TAAATATTGC 180  
 TTGAAGATG GCGCTCTGGG CATGAGCATG GGGCTCCATG ACTTCCCTTC TATCCCCATG 240  
 AGCCCCCTCCT NCATCCAGCG ACAAGCCATG GGCATGCATA CAATGCAGCA AGACCAACAC 300  
 ANGNGCAATA TTGAATTGGN TCATTCTATC TAAAAATTAC ATGGGGNGGG ANGNTN 355

SEQ ID NO:4570

LENGTH:353

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05422

## SEQUENCE DESCRIPTION:

GATCAGAAAT AAACGACAAA TAGTGTGAGA TGTGTTGTGA ACAGGCATGG TGACCGTGGT 60  
 CAGCGCCACT CTTGTTCCCT GAAATGTGCT TCTAAGACAG AAAATGTATT TNCTCATCAA 120  
 GGGTGTCTGG AGACACAGAC CGTGACCTTG GCGCANGGTG TGCATCAGAG GCGTGTGCTG 180  
 AGAAGGGTGG TGTAAAGCTG TGGAAAATGA CTCAAGAGCA ATAATCAGT GCCAAAGCTT 240  
 CCCTGCGCAT CTGAATAGNC ACAAGTGAAG CCCGTGTGCG CACAGTGCAG AGGCCNAGNC 300  
 TGTATTTCCA GGTAGNGTGG CTTTATTGTA CTGTGAATCC ATTACCTGT TAN 353

SEQ ID NO:4571

LENGTH:266

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05423

## SEQUENCE DESCRIPTION:

GATCGGGTCT ATTTCACCCA ATAGTCACCT GTGTGTCCCC CGAAATTGGG ATGGGTGAGC 60  
 ACCCTTGCTG TGGTGTAAAC TTCCTGTTAT TTAATCTCCC CCACGGTTTC ATTTTTNTNT 120  
 TCTGTTAATA CTTAGAACCT TCTAAGAAC TCCATGAAAT GAGGAAATAC TGTTTCTAAT 180  
 AATATGAGGA AAGANGTAAA ANTGTTCATT CCANGTGGCA AGTCTTATTG GACACATTTT 240  
 ANATAAGNTC ATGCATACCT GATAAA 266

SEQ ID NO:4572

LENGTH:279

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05424

## SEQUENCE DESCRIPTION:

GATCGCCCCG ATGAGGTGCT GCTGTGCTCG GACCTGGTCA AGGCATACCA GCGCTGCGTG 60  
 AGCGCCGCCA ACAAGGGNTG AGGAGCAGAC ATCATTCCCT GCCCTGGCAG TGACTTGGAG 120

2153480

CCCTGAAGAA GGGCCAATCA TGGGACCACA GCCACTGTGC CCTGCCGTIT CCTGCTGGC 180  
CCCTGCATAT GCCCCCTGAGC CTGGGGCTGC CACGTGTTA GGAAACAAAG TATGCCCTAC 240  
TGTCTGAAAA CAAATAAACG AGATGCCCTT GTTTCAAA 279

SEQ ID NO:4573

LENGTH:131

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05425

SEQUENCE DESCRIPTION:

GATCTAGGCC AGTGGCTGCT TGTCTTGTC GAGCTGTGTG TNTNCTNCTN TAAGCAGCTC 60  
CTCCCCGGAG TCCCCCAGCA CAGTCCCAGG AGATGACAGG AAGGAAGCAC CAGGGCAAGN 120  
CGGACGNTCA N 131

SEQ ID NO:4574

LENGTH:413

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05427

SEQUENCE DESCRIPTION:

GATCTCACCT TCCACCTCCT CGGGGAAGTC TTGGAAATGG CCAGGGCCGA GCAGTTAGCA 60  
CAGCAAGCTC ACAGCAACAG GAAACTCATG GAGATTATTG GGAAATAAAA CGGTGCGTTT 120  
GGCCAAAAAG ANTCTGCATT TAGCACAAAA AAAATTTAAA AAAATACAGT ATTCTGTACC 180  
ATAGCGCTGC TCTTATGCCA TTNGTTTATT TNTATATAGC TTGAAACATN GAGGGAGAGA 240  
GGGAGAGAGC CTATACCCCT TACTTAGCAT NCACAAAGTG TATTCACTGNT GCAGCAGCAN 300  
CACANTGTTA TTCGTTTGG NCTTCGGTTT NGTTNCCGGG GNCAGGTGTT TTTATTAGTG 360  
GNNTTTTAA AAGGNGGNTN GTNGGGACCC TGTTGGAGNA NAANCGGTTT TGN 413

SEQ ID NO:4575

LENGTH:55

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05428

SEQUENCE DESCRIPTION:

GATCACGCCA CTGCACTCCA GCACCCCTGGG CGACAGAGTG AGACCCCTGTC TCAAA 55

SEQ ID NO:4576

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05429

SEQUENCE DESCRIPTION:

GATCTGGCGT TGCCAGGCAT TCTGTAAGGG AGGGCTTTTC CAGTTCTGG AAATGGAAC 60  
GGAAAATNTG GCTGGAAACA TTAATATGGC TGAAATGGA AA 102

01422

SEQ ID NO:4577

LENGTH:420

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05430

## SEQUENCE DESCRIPTION:

GATCCAAGCT GCTTGAGGGG GTCAACCTTG GACCAAAGTT GCCTTAAGCC TGTGGTAAAA 60  
 GGGCTTCAGG GAAGGTAAGT GGCGCANCTG CTGGAAGCTG CCAGCTGCC CGNTGCCAAT 120  
 GGTGTGAGTG TCTTGGCCCT GTCCCTGCC CGGGGTCCAG CAGGTNATCC CTCCCTCTT 180  
 CTCTCTCCTT TGCGTTTGT TCCTGTAGTC ACTGGGCTAA TCTCCCCCTA GCTTGAAGCT 240  
 GTACATAGGG CCTCCNAGTG CAAATGNTNC TGNCATACC GTGCACCCCTT AGAAGCCTGC 300  
 GTGTGCATAG AGCGCCCNNT ACTTNCCAGT TAANTTCCNA GTTCTGTN CNTGAGCTT 360  
 GTATTTGTC ATGTGNCAAA TTCTGACTTT TGAAGGTTGG GNAAGTGAAG GGGATTNAN 420

SEQ ID NO:4578

LENGTH:307

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05431

## SEQUENCE DESCRIPTION:

GATCTGGGAC GTCCACAGT GAGGGGCTGG CCACCCAGCC CGACAGCCTT GCCTGACCAC 60  
 CCTCCAGCAG ATAGACCCCG GCACCCCTTC CTCTTCCTAG GGTGGAAGNG GCCCTGGGCC 120  
 GAGCCTGTAG ACCTATCGGN TCTCATCCCT TGGGNTAAGC CCCAGTCCAG GTCCAGGAGG 180  
 NTCCCTCCCT GCCCAGCGAG TCTTNCAGAA GGNGTTAAA AGGGTTGCAG GTNCCNACCA 240  
 CTGACCCCTTC CCGGNTGGCC TNCTGCNCA GCTTANAANC TTAAAGTCCA GNACGCAGTA 300  
 ACCTNTN 307

SEQ ID NO:4579

LENGTH:239

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05432

## SEQUENCE DESCRIPTION:

GATCCCTCTC CAAAGTGGTT GTCTTCTNT ACCTTGTGTC TTCTCTTGT AAAATGAAAC 60  
 TCAAAAATAA AATAAATGTG TCAAATTTG AAAAAAAANG AAAACTGAAA AAGCTAACAT 120  
 GANTTGTGTG AAATTGCATA ATGCTGTANT GCTAATCTAC AATATGTAAT GCTATCTTGT 180  
 ATGTNGNATT TGTAAATGCA CCACACAAGT GCAANGTAAA GACTGATTCA CNTTGNNNN 239

SEQ ID NO:4580

LENGTH:51

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05433

## SEQUENCE DESCRIPTION:

GATCTGACTG TACTAAATAT GAAAATAAA GCAGCACATA CTTTCTCTAA A

2153480

SEQ ID NO:4581

LENGTH:201

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05434

SEQUENCE DESCRIPTION:

GATCCATATA ACTGTTGGGT GCATCAGTGC TTTTAAAGG GGCTGCTTAC TATAGGGTTA 60  
ACTATGTATA TNCATTGTTA AGAGTTAAGT TGTTGTTGG CTGTTTCCTG GATTTNATAA 120  
CATACATGTG CAGAAATGTA TTCAAATGAA AGGNAGCATA CCTTTATCAN GATGCTATTA 180  
AANNTGANCA TCGNGTNAA A 201

SEQ ID NO:4582

LENGTH:170

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05435

SEQUENCE DESCRIPTION:

GATCATACAG TGAGGCTACA GTGACTGAGG GGAGAATCCC CTCCCTGTTCA CTCTCCCAAC 60  
CCTGCTCCAG CCCCTCAGCT TCCCAGACCC TCATGCANTT GGTTGTAAT NCTCCCAGGA 120  
GCTGTTTAC TGTCTACTTT TCAGGATTAA AAAAAANNNN AAAACTTAAA 170

SEQ ID NO:4583

LENGTH:393

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05436

SEQUENCE DESCRIPTION:

GATCGGACTC TGCCCTGGT CCTGGGAACG ACTGGACTGT CACGGGGTTA CCTCCTAGCT 60  
CTCCCAGTGA ACTCCTGCCA GGCACACACA GCCCCTATAG CACTGAGCTC ACATGGGACT 120  
GGGATATGGG GGCATCTCTT CCCCAGAGAG GCACTCAGTG AGCCTCCTGT GCCTGGNCCC 180  
AGCCTGGGCC ATCTCTTAGG TGAGACAGTT GCCCGAAACT AAGCCAGGCC TGGCTGGAGG 240  
AGCAGCAGCT TGGGGAGAGG GATTCCTCTG CAGACCTCAA GCCATCATGC GGTGGGTGCT 300  
GCCATGACAG AGGCTGGACC NCTGGGCCAG CGGGGTTGCT CAACCACCTT TTGTGCAAGG 360  
TGGCTTTGT GCTTGCCTGCCT GCAGGCAGAN GTN 393

SEQ ID NO:4584

LENGTH:162

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05437

SEQUENCE DESCRIPTION:

GATCCTGCC GAGGAGGAGG ACCAGGGTGC CGACTCCTAA CCCCCGCCAGG CAGCCTCGTT 60  
CTGCACAGGC ACTTTAGCCC GAGCCAGGNA CACCTGCGAG GGGGCAGGTG TGCTCCGCCG 120  
CCCTGCTGAT AAGCTGGCTT CATTAAACTG ACACCTCTCA AA 162

01424

2153480

SEQ ID NO:4585

LENGTH:122

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05438

SEQUENCE DESCRIPTION:

GATCTGTAGG GTCAGGAACA CAGCACCTAA CACAGTGCCT TATGGATAGT AGTTTATAA 60  
TACAGATGTG TTGGAAGAAT AAATGAATGG GTCCCTTTCA AACAAATTCA CCAGAAGTTA 120  
AA 122

SEQ ID NO:4586

LENGTH:288

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05439

SEQUENCE DESCRIPTION:

GATCTGTCAC CTTCAGCGAG ACCTATTCC TCCCCACCCC CAGAAACCTC TTGTGTCTT 60  
GCCTAGGCC AGGTGTTCTT GGCAGCCAAA TCGAGTCTCT CATTTCCTCT TGTGGACCAG 120  
TTAGTTTGCA CCATAACGCA GTATTCTGAG TTTGCAACTG TCTCTCTGAT GTGTGCCTT 180  
TGTTCAACAC AGTAACCCCT GCATTCTGCT CTGCTCTAAT AACTACCTG GAGAAAGTCT 240  
TTTCCTTATT TTCAATAAAAT GTCAGACATT ATTGNAAAGA AAAAANTN 288

SEQ ID NO:4587

LENGTH:188

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05440

SEQUENCE DESCRIPTION:

GATCCCTATG TGGCTAACAG ATTAATGNT TCCAAAATG TTGNAATTAA TATAGTNCTC 60  
TTAATTCCCC ACCTCTAACT ATATTTTGG GTTATTCTT TAGGAACAGA TGCCCAGGAG 120  
TCATATTACT GAGAACATAG AAATCTTTG CAAAGTTCTT GTTATNTGN CAAATTGCTT 180  
CCCN>NNNN 188

SEQ ID NO:4588

LENGTH:287

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05441

SEQUENCE DESCRIPTION:

GATCTGCCCG CCTCGGCCTC CCAAAGTGCT GGGATTACAG GCGTGAGCAC CAGTGCCAG 60  
TCCTGCCACA TCTTTTTGT TAGTTGCACT AGCAATACAA CCTTATCTAG AAAAGCTGGC 120  
CAAAAAAGAA AATACCATGA TAATAGGGTA CCTAATTAT TGCTTTATT AAGAAAAATG 180  
TAATATTCA TTCGAATAAG TACTTTGGG CTGGGATGNT ATTCATTAA GCTACTTGGC 240  
ATGCCACCCA TCTTAGGGAA TTATATGAGG GTTATACCT TAAAGTN 287

01428

2153480

SEQ ID NO:4589

LENGTH:289

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05442

SEQUENCE DESCRIPTION:

GATCAAAATT TCAAGTTGAC AAATTGGAT TTGAAAAC TCATTCTT TCAATTTTT 60  
TAATGAGGCA TAACATGCAT ATGGTTAAGT GCACAAATCT TAAGTGTACA GTCAGTGAAT 120  
TTTGCAATGT ATGTATGTAC CTGANGCAAG ATATAGAACT TATTTACTTG TAAATAACAG 180  
CTATATTGAT ATGTCACATA CCAAANANTT TACCCCTTAA NTTATACAAT TCAGTGGTT 240  
TTNGTATATT TGCAAAATTG TGCAACCNTC CCNACCATCT AATTCTAGN 289

SEQ ID NO:4590

LENGTH:293

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05443

SEQUENCE DESCRIPTION:

GATCCTCAAA GAAAGATTG TTAGAGATAG ACAGGTTCAC AATTTGTGGA AACCGAATTG 60  
ACTGAATCTG TGGCTTCATG CGCTGAAGAA GCTGGGTCCCT GGGGCAACAA GTGCTGTGTT 120  
GCCAGGACAA ATAGATGCTA AACATGGCAC TAAATATT ATTAAAAAAC TAAATTATT 180  
ATTGGCAAGC AAATCTTAGT ATCTTCTTC CAGTAATATG GCCTGGCTGA GGGTCAGACC 240  
ACAGGACAGG NGCGACCTCC GGCCCTTGACT GTCTGGGAAG CTTGATGGAT TTN 293

SEQ ID NO:4591

LENGTH:62

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05444

SEQUENCE DESCRIPTION:

GATCCACTTA GAGCAATAAC CACTTTAA ATGTAAAATA AAAAGACAAA TGNAAGGCA 60  
AA 62

SEQ ID NO:4592

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05445

SEQUENCE DESCRIPTION:

GATCTTCCA CTGCACTCCA GCCTGGCAA TAAGACCTGT CTCCAGCAAG ACCCGNGTCT 60  
CAAA 64

SEQ ID NO:4593

LENGTH:323

01426

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05446

SEQUENCE DESCRIPTION:

GATCTAGATT CATTAGGAAT GTNTTCTTGT CAGCCAGGCC AGGACCCGGG CTTGCCAAGA 60  
GCAGAGGCC C TCCCAGCAAC CAGGATACCA CCACTTTGGG GGCTTTGTGT ACAGAGGTCC 120  
GGGTCTGAGA CCTCATAGGC TGCGAGAAATC TGGGGCAGCC ACCATCAAGA AGCCCCCTCTC 180  
AGGGGCCAGA ACTCCTTGCG CAGCGTGGAT TTCTCAAGTC GGGACTGCAT AATTAAGCA 240  
GTTGCAGTTT TATTTTTTTT ACAGTTTTT TCCCCAAAAT GATTGTAGT TGTGTGTGCA 300  
GCACTTTCCGG CCTGATATGT GTN 323

SEQ ID NO:4594

LENGTH:70

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05447

SEQUENCE DESCRIPTION:

GATCAAAAG ATAAGTTTAC AAAGTTGAGA CCTCTCATAA AACAAATGAA TAAAAATTTC 60  
CTCTTGTA 70

SEQ ID NO:4595

LENGTH:183

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05448

SEQUENCE DESCRIPTION:

GATCACCTGT GCCTCCCCCTC CCCCTTGTT TGCCCTGTG TGGTTGGTCA AGGAGGGATG 60  
TGAGGGNAAT AGGGACCCCC CGACTTGCCC TCCTGCCTCA GTCTTCCCC CACCCGTCT 120  
CTTCCTTGTC CTTCTCTGGA AAATGCCAAA ATACACGATG TGAATAAAAG TACAACGGCT 180  
AAA 183

SEQ ID NO:4596

LENGTH:70

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05451

SEQUENCE DESCRIPTION:

GATCTATAAT TATGCCAATA CCACACTGTC TTGATTACTG TAACTTTAGA ATAAATCTTG 60  
AAAGTAGAAA 70

SEQ ID NO:4597

LENGTH:202

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05452

01427

## SEQUENCE DESCRIPTION:

GATCTGCCTG TCAGAGTCCA CGTGTCTGG TCACTGGTCT TTATAATTGT TGTGCAATAA 60  
 CTAAGGCTA AGGACTAGAT GCACTATCGT GTAAAGAGAT TACACATGAC TGTACCATGT 120  
 TGCACCTAAC CAAATAGTAT GTGGGGNTT AAAATCGCTT GCATTGTTTC ACAAAATAAA 180  
 TATCTCAATG TCAAATACTA AA 202

SEQ ID NO:4598

LENGTH:149

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05453

## SEQUENCE DESCRIPTION:

GATCCTGGNG CCTGGACCGG GCTGGANGAC AGCTGAGNAT GGGCCTAGCA GATGAAGCTT 60  
 GCCAGCAAGG CCAAAGAAA CGGTTTCTNC TGTTGGATAGT GGACAGAGAC CTTTGTAAACC 120  
 AATGGAATTA TTCATTTCNC TCTATCN 149

SEQ ID NO:4599

LENGTH:311

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05454

## SEQUENCE DESCRIPTION:

GATCAAGCAA TGGAAAAATT TGCACCACCG TGTCCCATGA AATTGTTCA ATGTTAGTT 60  
 TAGATATTGC TAACTTGTGC TATTAACCTT TTGACAAGCG TGTAGTATTG TTTGTTTGG 120  
 GTTTCTTTT GATTTATAAC TATTTAGTAG TCCCCAGCTA GCTACCAGTA CAGATTTAC 180  
 CCCATGGGTA GGATTCTATT GTTAAGCCAC ATAACAAAGC AACTAATTC TGACANCACT 240  
 GCAAATGGAA AATACGAACC AAAAAGT TACACCGATA AGTCANCAA ACTGTCCATT 300  
 TTTGGATATT N 311

SEQ ID NO:4600

LENGTH:221

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05455

## SEQUENCE DESCRIPTION:

GATCCTGCCT TTTCNTTTC CCCACAACCTT CACGCCAGNA GTTCGTTCAC ATCAGGTAAA 60  
 TCTTGAGAAA GCCTTGGTGC CCTCCCTCCCC ACCCCCCACT CAGTAACCAC GTGCCTGCAC 120  
 CCCCGNATCC TTTCTCAGTA GTTAAGACGT TCTAGGCAAT ACCATAGACA CATCTGACTG 180  
 TGTCTCTNTC TTTGAGTGCA AGAAACTCAA GTNATCTAA A 221

SEQ ID NO:4601

LENGTH:176

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05456

2153480

SEQUENCE DESCRIPTION:

GATCAGAGCA GCTACACTGA AGCAAAAACC CCAGCGCCCA ACGCTAAATA TATTGCAATG 60  
GAGAAACCGT CCACAATGGG GTGTCTCTGT CCTTAGCAGA GCCTTGGGC TGCCGTTAA 120  
GACCCCTCCTG CTACTCCCAC CCTTTAGCA TCTAGTAAAC CACGCGCTGT AACAAA 176

SEQ ID NO:4602

LENGTH:293

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05458

SEQUENCE DESCRIPTION:

GATCTCTATC ACTTTGCCAC CTGTTTGATG TGCACTGGAA ACTGGTTAAG CCAGTTGTC 60  
ATACTTCGTT TACAAATATA AAGATAGCTG TTAGGATAT TTTGTTACAT ATTNGTAAAT 120  
TTTNGAAATG CTAGTAATGT GTTTCACCA GCAAGTATTT GTTGCAAAC TAATGTCATT 180  
TTCCTTAAGA TGGTACAGC TATGTAACCT GGTATTATTN CTGGGNCGGG CTTNTTTAAA 240  
ATACNAGNCC NGGCCAANAN AAANTAGGAN CAAAAACCTN GGGGGTCTG AAA 293

SEQ ID NO:4603

LENGTH:184

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05459

SEQUENCE DESCRIPTION:

GATCAGGGAT GGGGATGAGG TGAGGGGATT TGCTAGAAAG GGGTGCAAAG GAATTAGCG 60  
GGTGATGGAG CTGTTCTGTG TCTTGATTGT GGAGTTATTA CAAGACGGTT ATTACAGTTT 120  
TGTNGTATTG AATTTACTG TATGAAAATC ATACCGCAAT AAACCTCACT CACATACGCA 180  
CAAA 184

SEQ ID NO:4604

LENGTH:372

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05460

SEQUENCE DESCRIPTION:

GATCAAGGAA TCTTCATGA AGGAAATTAA AATACAGAAAT GAAACATTAA NGTAAAAGT 60  
GGAGTAATTAA TTTAAATTAT GTGTATAAAA GGAATCAAAT TTTGAGTAAA CATGATGTAT 120  
TACATCATCT TCGGAATAG ATATGATGGA TTCTAGTGA GACCAAANTT ACTTCTGTTT 180  
ACTTTCTATC AGGAAGCATIC TCCATTGTAA ATATGTATT NCATGTTTAT TACAAAGACC 240  
CAAATGAAAT NTTTNNNGTC CATTNTNGC ATAGCCTAAT GGTAGACTNG GAATAANAGT 300  
TCTGTATTN TGGGATTCC NGNGTATAAN NCTGGTTCT AGNTGGGGGG TTAAGTCCCN 360  
TTTGGGTAAA NN 372

SEQ ID NO:4605

LENGTH:279

TYPE:nucleic acid

01429

2153480

TOPOLOGY: linear

CLONE:HUMGS05461

SEQUENCE DESCRIPTION:

GATCATGTAG GACGCAGCAT CCTGCCCTG GTAGAGAGGA CGAATGNCC ACACCAGGT 60  
GTCTACGAAA AANAAATAGT TAGTCACCTT CTNACCTTCT CCTCTTCCTC AAAGCCTTCT 120  
GTCCCTGGTT TTTGCAAGTN CTGCATTCC GCCGAGAACCGCGTTGCCT ACTGCTGCCA 180  
CCTCCTGTNC ATTAGAACT ATGCAAAGAC TCCGNTCCG TTTCTGAG CTCCNGGGC 240  
CCCAGAGTCT CTGTTGATT ATTATTTAT TTATNAGN 279

SEQ ID NO:4606

LENGTH:324

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS05462

SEQUENCE DESCRIPTION:

GATCGAATT CACATTGTAG AGATGTATAG CTGTGATTAA GCTGCATATG TATGCTGGGA 60  
AACGGCTTGA GTGGATGGCT AATATAAAAG TTGTTGCCA TAATGCCACA CCTCTCATCT 120  
GCTTGAATA TGGACCAAGTA TTCTAAAGTA TCAGCTACTG GGGTCTCATT CACTACAAGA 180  
TAANTTCAAA CTTCACAGNA CTTTGAGCA GTTCACCACC AGGCAGGACT GTGTCTGCAA 240  
ACTCNCTTGT CTTCACAGAC GNCTGATTAA NGCNANNCT CTGGNNCTC AAAGATNTAT 300  
TGGGGAGTGN NGGTTTNTG GGNN 324

SEQ ID NO:4607

LENGTH:225

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS05464

SEQUENCE DESCRIPTION:

GATCACAGAC CTAAGGCCCA GGCCACCTNT CCANACCTGG AATCTATGCA NAANTAAATT 60  
CCCCCTTAACC TGGGAGGCAG CGACACGTGT NACTCTGTA AGAAACGTGT GTACGTAATG 120  
GAACGGCTGA GCGCCGAGGG CCACCTNTTC CACCGGNAGT NTTCCGATG CAGCATCTGT 180  
GCCACCACT TGCGCTGGC CGTCTACACC TTTNANTGCN ATGAN 225

SEQ ID NO:4608

LENGTH:251

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS05465

SEQUENCE DESCRIPTION:

GATCTAAATN CAGACTNNGG AGTTGGGAGG AGGNACAAA GTGAACCATC CTTCATTAT 60  
TCAGTCATTG GTTCATCTGT CAAACACGTA TTTGGACATC AAGGTGAG AGATGAACAA 120  
TGCATGGNTT TCATCTTNA GGAGTTCAA ACCTAGTGGA GAGANCACAT GGTACAATCG 180  
TAACACATGA AGGTCAAGTA AGTNCTGCAG TAAAGGTACT AATAACATGT TCCTTGGNNC 240  
AGNAGGATGN N 251

01430

2153480

SEQ ID NO:4609

LENGTH:239

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05466

SEQUENCE DESCRIPTION:

GATCCAAGTG TTGCCTGTCA GCAGAGATAG GAGTGAAGTT GATGATGATG GTTAGATGGC 60  
CTCACAAAGGG ACTCTAGTGA TAGTAAAGGT TCCAGTGGCA AACACACAAG TGAAAAGTT 120  
GAATATAGTT TCATAATGTT TGAGAGTGT AAAAATGCAT TTTTAAATTAA ATACATTACT 180  
TTCTGTACTA TTTTAAATAA GTGTGTATCT AAATAAACAC ATAANATGTT ATGAGTAAA 239

SEQ ID NO:4610

LENGTH:344

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05467

SEQUENCE DESCRIPTION:

GATCATCCTG GCTGGGAGAA GTGGGACCGA GCCACCCAGC TNCACTATCC CCAAGCNGCG 60  
CTACAGCCGG GATGGGAGGC ACGTGGCCTC TCTTTTATCC GTCTATTAT NTTGTAAGTG 120  
TATTCTGTG GAGGAGGTTG TTGCTTTATT TTTTAAGGC TCTGGAGTNT TGTGTATGGT 180  
TTCTTTCAC ATCNGGGCCT CCCATGGGCA CTTCTAAGAA GAGAGGGGAT TTCTTGAAA 240  
AGGAGAGAGG AATCCCCTAG AGCAGGGGAA GCANTGCCTG CCAGCTNTG TGCACCTTNC 300  
GGGNGAANTT AAATATNCNN NAAATTTCA AACCAAGNGAA AANN 344

SEQ ID NO:4611

LENGTH:128

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05468

SEQUENCE DESCRIPTION:

GATCTCTCTC TCTCTCTCCC TTTCTCTCT CTCTGTTGGA TGCTTCTGTA TCTTTTCCA 60  
CAGCATAATG TCTGGTGTGA TGGGGAGCTA TTTATTGAAA TNAAAGATTA TNTATTGTG 120  
CCATGAAA 128

SEQ ID NO:4612

LENGTH:92

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05469

SEQUENCE DESCRIPTION:

GATCCATTTC TGGGATAGAA TTGTATTTT TAAGTCATT TTTTTCTTG AAATGGATAT 60  
GTACAAATAA AATAAATGGA AGACAGGATA AA 92

SEQ ID NO:4613

LENGTH:130

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TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05470

SEQUENCE DESCRIPTION:

GATCCAACAC ATTCAAGTCA GTAGAANCAA ACCAAAACAT GCAAGCTCA GCCTGNTCGA 60  
GTTCTATACT TGTCACCTAA ATCGTATGTT GTATGATACA TANGTTATG TATTAGCNCG 120  
TAGCCGNGGN 130

SEQ ID NO:4614

LENGTH:279

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05471

SEQUENCE DESCRIPTION:

GATCACAGCT NCCCTTGAAT CTCATTGCCT CAGAGAACAGC TAGAGGGCTC TTGGACTATC 60  
CCTAGGGCTA CACAAGAATA GTTCAGCCTT CTGCCATGCC ACACAGCCTC AGCTTGAATC 120  
TGGTTCATTG CGTCCTCGTG TTCTTCTCTC ATCCTTGCCT TANACCAGGG ATTCTGATAC 180  
CGAAGAACAGAG GGGCCAATGA AAACCATGGA GTCTGTTCGT GACTCCCAGG GCTGGGACAT 240  
TATGTAGGAG CCACTTCTATA AACATTCTCT TTACTCAAA 279

SEQ ID NO:4615

LENGTH:333

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05472

SEQUENCE DESCRIPTION:

GATCAGTCAT GTGTCCGTA CCTCGTTCCA TGACATCAGG ATAGCTGTGT TTGCACACCA 60  
TGCTCCATGT NCATTCCGAG CCAGGAGGGG TTCTNAGTGG AGCCTGGCTT AGGGAACAGG 120  
GAGCGATGGA AGAATGCCAA CATTAGCGTT GGTCTTCTCT TGTNAGGAAT NAAGGATGCT 180  
TGCACACATG CACCCCTCA CTCTCACACT TGACACACATA CACACACACA CACACGAANA 240  
TGGTTGGTTT GTCAAANCTC ACTGTAGTAC ATAAAGNTTG CACTCTGNGT NNNNATATCT 300  
AGCNGNATGG GGGGTACGNT TTGGCNGGT GTN 333

SEQ ID NO:4616

LENGTH:335

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05474

SEQUENCE DESCRIPTION:

GATCTCTTCC CACCTACCCCT ACCTACTCCT ACCAANACC CCCCTCCCC ATTAATGTGA 60  
GTAATGAATT AGCCTGACCA CAGGGTGTCA CTGTAGGCTA ATGGAAAATA CCCAAGGGNG 120  
GGCAAAGGCC CCCATCAGAT GCATGAAGGT TTGCNAATGT TGACTGCCAC TGCCCCACAC 180  
ACTGTGTCTT TATAGANTTN CCCTTGCCN CACCCCTCTTC CTGTNTCCAA CCTGGGACAC 240  
ANCTTNGCTC AAAGNGCTGG TGGNTTGTGG GGCATTAATC TACAACCANA GTCCCTGAATG 300  
GAGGCAAAGA GGGCCCCACN GGNTTGNNGG GGNTN 335

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SEQ ID NO:4617

LENGTH:131

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05475

SEQUENCE DESCRIPTION:

GATCCATTCA CATTGCAAAC TTATCCTACT GTATAGCCAT CCATTGTAAG AATAACATTT 60  
TCNATTATA TTGTGTACAT TACTCCAGTG AACATTCTNN ANCTCCTCTT TTNGTATCCT 120  
GTGCAAGANT N 131

SEQ ID NO:4618

LENGTH:323

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05476

SEQUENCE DESCRIPTION:

GATCTCAGCT ACGTGGGAGG CTGAGGCAGG AGAATCTTT GAACCTAGGA GGCAGAGGTT 60  
GCAGTGAGCC AAGATTGTNC CAGCCTGGGC GACAGGGTGA GGCTCTTGT TCAAAAAAAAA 120  
AAGTCCACAT CTTCATGANC CCTCAGACTC TGGAGTTGGG TGTCGGCTT TTTAGCCAGN 180  
TTTGTGGGA ATTGCCCTTN NCCTATTAAA GANGGAANGT GGGTAATGGA GTCCCAGCCA 240  
CTCANGAGNC TGGNTATCCC CCGAGANTGG CTTGGGTTAC CAGCTATGGA CCCTTGGAAAG 300  
ATGANTCTAN ATCCTTCTCA CNN 323

SEQ ID NO:4619

LENGTH:346

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05477

SEQUENCE DESCRIPTION:

GATCACCTCT CTGTATCCCC CACCCACTAT CCCATTNCC CTCCTCCTCA GCTAGGGCCA 60  
CGCGGGCCCCA CATTGCACTT CTGGGGGGTG ACCGACTTCG TACACGGGTT TAAAGTTTAT 120  
TTTNATGGTT TAGTCATTGC AGAGTTCTTA TTTTGGGGGG AGGGAAAGGG GGCTAGTCCC 180  
CTTCTTTGG CCCTCCGCC CCGCAGGCTT CTGTGTGCTG CTAACTGTAT TTATTGTNAT 240  
GCCTTGGTCA GGGCCCTCT ACCCACTTCT CCCAGTAAGT TGTGGCCCCA AGCCNTATC 300  
CNTGTGCTGT GTGGAGTGGN CAACCTGACC CCCGNAAGNG GGNNA 346

SEQ ID NO:4620

LENGTH:343

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05478

SEQUENCE DESCRIPTION:

GATCTTTTA AGGATAGACG TGGTCTCATG CTTCCTTGT NCGACTCCGT TTTAAAGGAG 60  
CATTGTAACC ACTATCCTCA TCCCTACAAA AATCCAGTGG ATGCACTTCC AAATTACTTC 120

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TGTCATTTG TATGTGTTGT GTTAGGGNT GCGTAATTT CACTGGATGN TGAGATAACAT 180  
GGTGTACTA TGTCACTTA TTCTCTGTGA ATATGTCTGT ACATAGNCAG GAAGCTCTAC 240  
TTATTTGTNC ATAGGTGTC TGANGTATGT ACTTCTGTCA CATGGNCTTC ATTCTGATAA 300  
AGGGTGTTC TCCCTTGNTT CACTGTCCAT ACCTTTGTGN NGN 343

SEQ ID NO:4621

LENGTH:50

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05479

SEQUENCE DESCRIPTION:

GATCCTCTG TGCTTGCTTG CATCTTAAT AAAGACATGT TCCCAGGAAA 50

SEQ ID NO:4622

LENGTH:170

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05480

SEQUENCE DESCRIPTION:

GATCCAGCTA GGCTGGGACA CTCCCTAAAT CAGCTGCCTG TTGTTAGCAT CAGGCAGAAT 60  
GAATGGCAGA GAGTGATTCT GTCTTCATAG AGGGTGGGGT ACTTCTCCAT AAGGCATCTC 120  
AGTCAAATCC CCATCACTGT CATAAATNCA GNNGNAATNG NCTGNACAAA 170

SEQ ID NO:4623

LENGTH:290

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05481

SEQUENCE DESCRIPTION:

GATCCTCTCT GTGTAATCC TGCCCGGTGC TGTNAAGGCT GGACGGTGGA GGACCTGCTG 60  
GGGTCTCTG GNACCCCGCT GTTGCTTCTN CCCTCCCCCTG TGGAAAGGTC TATATNACGG 120  
GCTGCCTGAG GCCCCAGAAC TCGTCTGTAA ACCACCTTTT CCAGCCAGAG TTCCCAAAGC 180  
TGGAACGCTA GCTGCCTGCT CTTCTTAAG NTGGCCTCCC CCNGACCGT CANGTCCTC 240  
AGTTGCCAGG GCTGGGCCA NCCACTGTNA CACTGNGGNN TGCANGANAN 290

SEQ ID NO:4624

LENGTH:125

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05482

SEQUENCE DESCRIPTION:

GATCCAGCTT CAGCTGCACA CCTCTGTCCC CTGGATGGG GAACTAAGGG AAAACGTCTG 60  
TTGTATCACT GAAGTTTTT GTTTGTGTT TATACCGTGT CTGANTAAAA ATNCCCACNG 120  
TTAAA 125

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SEQ ID NO:4625

LENGTH:252

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05483

SEQUENCE DESCRIPTION:

GATCCTGACC CCAGCCAACA GCTGAGCTGC CGGGCCTCCT CGAGGCCCTA AGCCAGCCCC 60  
AGAGGTCCA TCTNAAGCTG GAGTACCCCTG GGGTCAGCAG CAAGAGAAAG AAGNGGAGAT 120  
TTNTNTTTN TTTTCCCCT CAGCCCTGCC ACCGTGGGGA GTCTGGTTT TNTCTTCATC 180  
CTGTCTCTCT CCTCCTTACT CTGGATAAA TAAACAGCCT GTGAGCACAC AGGCAAGCCC 240  
GGCCAGTGA AA 252

SEQ ID NO:4626

LENGTH:334

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05484

SEQUENCE DESCRIPTION:

GATCGTNACA AATCTNCCT CCTCACCAAGC TAGTCTGGGG TTTCTCTCC CTGCCAGG 60  
CCAGAACTGC CTTCTTCATT TCCACCCACG CTCCCAGCCT CTTAGCTGAA AGCACAAATG 120  
GTGAAATCAG TAGTCTCGNT CCATCTNNAA TAGACTAAC CTAATGCT CTAGGACGGA 180  
CTGTTGCTAT CCAAGNGTT GGTGTTACCT TCTCCTGGGA GGTCTGCTG CAAACTCAAG 240  
TTCCNCAGGA TGGTCAAGNT GTCANGANAT ACAAGTTNC ATCAATTGTA ATTATTACCT 300  
GGTCTTNCA ANTTGCAAN GGNGTTTGG GNTN 334

SEQ ID NO:4627

LENGTH:192

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05485

SEQUENCE DESCRIPTION:

GATCTTCCAT CAGGGCCCGA GTAAATCCCT AAGTGNCTA ACTGCCCTCT CCCTGGCAGC 60  
CATCTTGTC CCTCTATTCC TCTAGGGAGC ACTGTGCCA CTCTTCTGG GTTTCCANG 120  
GGANTGGGCT TNCAAGGTNG GNGTNTCTGT AAAATCAACA GGTAATAAAA ACTGTGTATG 180  
AGNCCNGGCA AA 192

SEQ ID NO:4628

LENGTH:315

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05486

SEQUENCE DESCRIPTION:

GATCTACAAT NAGATATCAC TTAACACTCA CTGGAATAGA TATATAATCA AAGTGATAAT 60  
ATCAAGTGTG TTGAGGATG CAGAGAAATT GGNACCCCTCA TGCACTGTTG GTGGATACCC 120  
ACGTGATATN AAAACAAATG TCTACACAAA AACTTGTGCA CAGATGTTCT TTGCAGCATT 180

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ATTTATAATA GCCCAAATT GANACAGCCC TANTTCTAT CAACTNACAG GTGAATAATC 240  
ANAACGTGGC ATATCCATNC ATGGNGTATT ATTCAAGCATT ANANNATGGG ATGAAGTACT 300  
GGTATGCACC ACTCN 315

SEQ ID NO:4629

LENGTH:51

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05488

SEQUENCE DESCRIPTION:

GATCTGAAAT NATGGTCAA AAAATACATT CATAATAAAA GTCTTAACAA A 51

SEQ ID NO:4630

LENGTH:337

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05490

SEQUENCE DESCRIPTION:

GATCAATGCC CNTNTNTCAAG TCTCATCTGT ACTCACGGCA GCCCTGTGGA GTACGGTGTA 60  
CTGGCCCAGC TTACAGATGC AGAAAGCGAG ACGTTCTGCC ATNAGATAAA GTCACGTGGC 120  
TCTTTAGTAN CACGGACAAG GCTCCTCGCC AAGGAACTCG TGGCAGAAGA GGGCAGCAGT 180  
TGGCAGTAGC TGCCGATGTC TGTCCCCAGC TNACCACTTC CTCCCTGTGG CTGTGCCATG 240  
CTCGTGGTTT CAGTNCCGT GTGTNCATGT GNCTNCCCTT NAAGAGCTCG CANCTGGTGT 300  
GCTTNGGGGG TCCCAGGGCT GTGTAGNGTN TTCTNCN 337

SEQ ID NO:4631

LENGTH:90

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05491

SEQUENCE DESCRIPTION:

GATCTGTCTA TTTCGTTCAT CCATAGTTGC CTNACTCCCC GTCGTGTAGA TAACTACGAT 60  
ACGGGAGGGC TTACCAATTTC TTCCCTGAAA 90

SEQ ID NO:4632

LENGTH:97

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05492

SEQUENCE DESCRIPTION:

GATCAAAGGC TCTTCCCTCT TTTGTTGAG AGTTGGTTGT TTTAAAGCTT AATGTATGTT 60  
TCTATTTNAA AATAAATTT TCTGGCTGTG GCAGAAA 97

SEQ ID NO:4633

LENGTH:320

01436

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TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05493

SEQUENCE DESCRIPTION:

GATCATCGTA TGCAACAGCT GGGTAATAAG ACTGGCATAG CTCAAACTAT CCTGCCAAC 60  
GCTCTCATCT GATTTTCCT CCCTCTCCC CCAACCTCCA ATCACCCCTGA GTCACCTGTA 120  
AATTCAATTG TCATTCAAAG CGGAATAACA AGTTGTCCCT AGCAAAACCG CTGAGCGCTT 180  
TATAATTTG TGGGTATT TTGTCAAGTAG GTAGCAGAGG CGGAAGTATT TTTTGGTGTA 240  
ATTCTTGAAA TTTCTGACA GGAAACCGGN TAAAGATAGA TGTGTCTGAG GNTAAAAAN 300  
GTTNGNNNNG NNNTGNNTTN 320

SEQ ID NO:4634

LENGTH:146

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05494

SEQUENCE DESCRIPTION:

GATCTATGAA ATAGGTAACA TTTGAGTAGG TGTCAATTAA ANATAGTTGG TGAATGTCAC 60  
NTATGCCTTC TATGTTGTT GCTCTGTAGA CATGAAAATA ACAATATCT CTCGATGATA 120  
ATTGTATTAA AGTAATCTAT AAGAAA 146

SEQ ID NO:4635

LENGTH:177

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05495

SEQUENCE DESCRIPTION:

GATCTATCCA GCTGCTTCCT TGTAGCCAAG AATGTGTTCA ATGAATTGTG ATTCACTGAT 60  
TTTATTGATT TTGTTTAAA ACAGGGAGAC TGGTATTTT GAAGCTGCTA TCATTTCTA 120  
TTCTNTATT AATNNCTTG TAATCATCTT ATAAAGTTT TCTTATTTAG TGGGAAA 177

SEQ ID NO:4636

LENGTH:103

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05496

SEQUENCE DESCRIPTION:

GATCCTCTCC TTGTATGTAACCTTTTT TCCCCTTCT AGCAAGTACT TTCAAAAGAA 60  
CTCTGTACAT TTTAACATAA AAAATAAATT ATGTTGAGCC AAA 103

SEQ ID NO:4637

LENGTH:145

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05497

01437

2153480

SEQUENCE DESCRIPTION:

GATCCATTG TAACTACTCT TAATATATGG TACATAGTTT AAAAAATTN ATTGAGCTTA 60  
AAGTGTATCT AGTTTGTGT CCTAATTATC CTGCTTAACC TTCTATTGTA AGGNTTNCC 120  
ACGTCAATAA ATATTATAAT GTAAA 145

SEQ ID NO:4638

LENGTH:279

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05498

SEQUENCE DESCRIPTION:

GATCANCAAA CTCAACACCA TCTGCAGGA GCAACGGGNT GGCCTTAAC ATTGCTGAGG 60  
CTTCAAAGA TGTGTCAGAA CCCATTGTAT TTCTGCAACA GATGCAGGAG TTTAGAGAGA 120  
AAATCAAAGT AATCAAGGAA ACTCCTTAC CTCCCTCTAA TTTGCCTGCA AGCCCTTAA 180  
TGAAGAACCT TGATACCAGT CAGTGGGAAG ACATAAAACT AGTCGGTGTG GATAAACTTT 240  
CTTTGCCTCA AGACACTGGC ACATTCAATTN GCAAGGNTN 279

SEQ ID NO:4639

LENGTH:242

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05502

SEQUENCE DESCRIPTION:

GATCAGAGCA AAGAGAAAAG AAAGCATAAG GACACTTACT CAACAGAAC ACCTTAGGC 60  
GAAGGAACAG ACAATATGT CAATAGTATC TCAGATTGAC CATTCTGTT ACTTGTCTT 120  
TCTACTTCA GAAACTAAAT GACTTCAAA TTTGGGTATA GACAATAAAAG AACTGAAGTG 180  
CTCACTACTC AGTGATTGG AAATTTGAT GCTTGTATAA ATGTCAAGATA ATTAATTTCN 240  
AN 242

SEQ ID NO:4640

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05503

SEQUENCE DESCRIPTION:

GATCTTGTAA GACACATGAA TGTGTATAAT CATGTTAAAT GCAAATAAAA CTAGTCATA 60  
GAAA 64

SEQ ID NO:4641

LENGTH:62

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05504

SEQUENCE DESCRIPTION:

GATCATNAAG GTAAGGACTG GAGTNATGCA GCCACAAACC AAGGAATATC AGTAGCCATA 60

01438



2153480

TOPOLOGY: linear

CLONE: HUMGS05509

SEQUENCE DESCRIPTION:

GATCCCCGGG TACNANTNAN CCATGCAGGC ATGTTTTTT TNATTTTGC ATAGGCAATC 60  
CATTCTGTAC AGGTAGCTAA CTTTGAAAC GCTGTGTATT CCCTCTGCC CCATGGCTGC 120  
TGGTGTAAAT AACTGCATC TCCC GTTGGT AAA 153

SEQ ID NO: 4647

LENGTH: 342

TYPE:nucleic acid

TOPOLOGY: linear

CLONE: HUMGS05510

SEQUENCE DESCRIPTION:

GATCCAGAAG TCATTAAGAACATAAGG CTGGGGAGGC AGGGGGAGTA AGTTCTATT 60  
GAAAATCTTA ANAGCTTAAC AAAACTAGGG TACTAAATT AGTTATAACA TGTTACAGAC 120  
TTAAATCTATA GAGCTGCCCC AACATCTAGA CAGTCTCTCC TACTGATTAT AAATGAGTGA 180  
AAACTATCAG TTAGAAAAAT CTAATTTAAG TTGTTAATAC ATGTTCTT GGTGAGCACC 240  
TGGATATANT TATCACAAAT NCTTTATAC ATATGTCGAA AATGCTTCA ACAAACCTAA 300  
GTGTCTTAAT TACATGCCAC TTTTNAGG CTCACTTAT GN 342

SEQ ID NO: 4648

LENGTH: 333

TYPE:nucleic acid

TOPOLOGY: linear

CLONE: HUMGS05511

SEQUENCE DESCRIPTION:

GATCGCTACG GTTCTAAATA CTGAAGTCAT GATGTGTATT TCCNGGAGAA ATT CCTCTTT 60  
AAATGAACAA GTAACCACAT CTCAGGCGGC AGTGAAGTCC AGATAGTTT GCAGATTGTT 120  
TTGCTACTTN TNCATATGGT ATATGTTCT GNTTTAAAT ATTNCNTNTG AGAAATTCTG 180  
AGTNCTGATG TAGGAGCTT CCTGTNATNN CTGTTCACG TTCCTTCCTG TCACACCCCTC 240  
CTTGTGGCGT CTCTGTGTAT ATCCTNGGCT TTATTTCTN GGANCCTTGN GATTCAACA 300  
CTGNGGGCCT GGAGACCTCG GCTCCTNCTG GTN 333

SEQ ID NO: 4649

LENGTH: 187

TYPE:nucleic acid

TOPOLOGY: linear

CLONE: HUMGS05513

SEQUENCE DESCRIPTION:

GATCATGAGA AATTACCAAA ATGTCACCA ATAGAATGAG TGAATCACCT GTGGTATATT 60  
TATAAATAAA AATATTAANT AGAAGGTAAA ACAAATCAGA CATAACACACA TTAGATAGAT 120  
AAATTTAGAG GAAAAAAA AAACCATGCA AGNTTCAGCT NCNCNGTNC TNTGGTGNC 180  
CCTAANN 187

SEQ ID NO: 4650

01440

2153480

LENGTH:228

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05514

SEQUENCE DESCRIPTION:

GATCGAGGGG GTATGCGTGG GGGAGTTGTG AGTGAGCTCA GCTCCTTCA GGCCTGGCCT 60  
CTCCCGAAC AGAGTGAAGC CCCTGCCCTG GACCCCTGCT CCCTCTAAC CTTGAGGGCC 120  
ACCAATGGAA GAGCCGCCCT TTCATTCTGC AGCTCCTGCG GCCAGGCTGA GCTCTGCCCT 180  
CAACTTTGTT TTCTCTCATG TTCTCAATAC ACTCTGCCTC AAATCAAA 228

SEQ ID NO:4651

LENGTH:300

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05515

SEQUENCE DESCRIPTION:

GATCTGTAGT TAAGGAAACC AAGGGTCAT TGGGGCAAAA GCATTGTTTC TCAAAGCTCC 60  
TTGATTAAGA GAAAGAACAG AAATTGCAC AGAAGATAGT GTCAAGGAGT GAGAAAGTTT 120  
GTTTGAGGGC AGTAGCTCAG TGTGGAAGAA ATCCTGAAG TTTCTGTTGA AGCCATACAA 180  
TGTCTATGG GGTTACTCTC TAAGACATTC TCTGAGGTGT GTGAGGAAGT CACTACTCCT 240  
AGCCTTTGTT AAGATGTAAT TTTAAATATT CAGTTATGGT ACTATGTTG CAACTCTCN 300

SEQ ID NO:4652

LENGTH:154

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05516

SEQUENCE DESCRIPTION:

GATCAGTTA TATTGCTCTT AAATGATAAT CCTCAGCTTC CAAGTTTTG TGAACTCACT 60  
TTGGTTTATG TGTTGCTAC ACTCACTGAG AAATTAAACA CCTTGCTTGA TTTATTGTAA 120  
AAAGGAAAAAA ACAACAGAGC CATACTTAAG CAAA 154

SEQ ID NO:4653

LENGTH:250

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05518

SEQUENCE DESCRIPTION:

GATCTTTATG CTGTTATNAC AGGAGAAGTG ACATACTTTA TATATGTTA TATTAGCAAG 60  
GTCTGTTTT ANTACNATAT ACTTTATATT TCTATACATN TATATTNCTA ATAATACAGN 120  
TATCACTGAT ATATGTAGAC ACTTTAGAA TTTATTAAAT CCTTGACCTT GNCGATTATA 180  
GCATTCCATT AGCAAGAGTT GTACCCCCNC CCCAGTCTTC GNCTNCCTCG GGNTTAAGCT 240  
GTTTTATGNN 250

SEQ ID NO:4654

01441

LENGTH:240

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05519

## SEQUENCE DESCRIPTION:

GATCCCCACC CCAATTCAAT CCCGGAAAGGG ACTTACTTAG GAAACCCCTTC TTTACTAGAT 60  
 ATCCTGGCCC CCTGGGCTTG TNAACACCTC CTAGCCACAT CACTACAGTA CAGTGA 120  
 CCCCAGCCTC CTGCCTACCC CAAGATGCC CCCCCACCC TGACCGTGCT AACTGTGTGT 180  
 ACATATATAT TCTACATATA TGTATATTAA AACTGCACTG CCATGTCTGC CCTTTTAAA 240

SEQ ID NO:4655

LENGTH:290

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05520

## SEQUENCE DESCRIPTION:

GATCCAATAA GTCAGAAAAG AAGGAAGGAA GTGCTGGTAA GAAGGAAGGG AGGAGCGTAT 60  
 CCTAAAGAAC TACTCCAAAC TATACAAC TGTTTTCTC CCCAATTTC CTAGGGATT 120  
 CTCATAATTA TCTCCTTCT CTTCATAAAT TCTACTTACT GACCTGAAAT AAAATTCTC 180  
 ATTTGGTTGT CCTCAAGGTG CAGAATATGG ACTTAAGGCT CCTCCAGACA ATTCAAATGT 240  
 ATTGTAGACA GTTAAGNTAG AGTAAAAC TC ACCGTTTGT CCCACTGAAA 290

SEQ ID NO:4656

LENGTH:355

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05521

## SEQUENCE DESCRIPTION:

GATCGACAGG CATCCACAGT TGAGTATCTC CCAGGCATGC TACATTAAA TTGCCCTAAA 60  
 GGTCTCCTAC CCAAATTCTC CACGCTGGTC TTNGTTAAA CTAGGCCCTG CTAAGTCTTA 120  
 TAACTTTCA ACAGGTTGG ACCAACAGGG CTTTATTCCA GGANCAAATT ATCTTATGCC 180  
 TTGGGACATT GNCACTCAGGA CTAGAGCTGN AGATGAAGGA GACTTAGACA CAAACTCTG 240  
 GCCTGCTCCA AATAAAGCTA TTCCTNGNAA GAGNAGTGCG GTTGTAAATGG NTAAGAGNGN 300  
 AGANCGGGCA GATGACATTG NTCGAGCTN TNNTGGNCTT TGAATATNGA AGTCN 355

SEQ ID NO:4657

LENGTH:382

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05522

## SEQUENCE DESCRIPTION:

GATCCGAAA CGATTAATTC TGTCAGACAA AGGGCAGCTG GATTGGAAGA AGATGTATTT 60  
 CAAACTGTGTC CGATGTTACC CAAGGAAAGA GCAGTATGGA GATACCCCTC AGCTCTGCAA 120  
 ACACTGTCAC ATCCTTCTC GGAAGGGCAC TGACCATCCG TGCACGTGCA ATAACCCAGA 180  
 GAGCTGCTCC GTTCACTT CACCCNNNGN CTTTATCAAC TTGTTCAAGT TCTGGNATCC 240

2153480

CAGCACATGA CAACACTTCA GAAGGGTCCC CCTGCTGACT NGAGAGCTNG GGAATATGGC 300  
ATTGGACAC TTCATTGTT AAATTAGTGT ACATTTTAA ACATTGGTT CGGNNAACTT 360  
TCAGNGGTNA GGTGGNGNN TN 382

SEQ ID NO:4658

LENGTH:326

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05523

SEQUENCE DESCRIPTION:

GATCATTAAA AACTAAAAAT ATATTTTATT AGAAAACATT TATCTATGAA TGAATATTTC 60  
CTTGATGCTG GTCTCTGCAC ACATATGCTT GGTTACTTGC ATGCATTCA TGTTGTTCA 120  
ATAAGTGAGA TGATTACAGA TAACTTAATA CTGTATTTNC CTTATATGGA AAACCGTTAT 180  
AGACCCAATA ACAACTAACN CTTCAAAAG AAANTATTTN CTATTATGAN TGTTGATTT 240  
CATACCNAAG AAGATGGAGA GTCTAAAATT TGGGNTATGG ATNCTNGATG GNNTTTTAN 300  
TNNGNAAGCC TTCTTNCAAG TTTNAN 326

SEQ ID NO:4659

LENGTH:133

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05524

SEQUENCE DESCRIPTION:

GATCAGCTTT GCAGTAGATT ATGCTGCATC CTCGTGGCAA AATTCTGTAT TCTTAGTGAT 60  
TGTTACAAAC CCCTTTATTG CTGCTGAGA AAGTGAAGA TTGTGTATTT CTATTAACAC 120  
ATTTACAATC AAA 133

SEQ ID NO:4660

LENGTH:264

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05525

SEQUENCE DESCRIPTION:

GATCAACATC CGGAGATGGA TTTTCCAAG GCTAAATTCA ACTAGCCCCCT GTTTTTCCCT 60  
CCCTGAACTC TTGGGGCTGA GCTGCAACCA CCCAACTTTC TTTCCCACTC TTCTCTGGGA 120  
CTTGTGGGTC TCAGGGCTTG GGGCAGGCAT GGGACTGGCC CAGGCACACA GGTCCCCGGGG 180  
CATCAGGAGA AAGGCTGGGT CTTGGGACCT TGTCTCCCC AGTTGGCCTA CTGTTACACA 240  
TTAAACGAT TTGCCAGNT CAAA 264

SEQ ID NO:4661

LENGTH:319

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05526

SEQUENCE DESCRIPTION:

01443

2153480

GATCACCTNT TCCCTCAAT CCTTGTGGCT TCTGGGAATC TTCAGAGCCT GGGTCTGAAA 60  
GGTGTTCCT ACATGTCTCA GGGCTGGATG CAAACCTGGC TGGGGACCTG AGCATCAACT 120  
CCCATTAGA ATCAGACATC TCCCTCCCT GCAAATTGTC TACAACCTACC AAATTGCTCC 180  
AGGTTTGAGA TGGTATTGCT AAATTAAAAA TTAAACAAGN GACCCANCAN CAGCTTTTA 240  
AAGTGTCTNC TATTCATNN GTATTTNNNT NAACCTTGGC CCCANTTGNT AGAAAAGTCT 300  
TTTGCNGAAA TGNATTNN 319

SEQ ID NO:4662

LENGTH:239

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05528

SEQUENCE DESCRIPTION:

GATCAAAACA GTGTGGTGCT GGCAAAACAA GAGACATAAN TCAGNAGAAG AAAGAGTCCA 60  
GAATTAGACC CACACACATA TGGACAATTG ATTTTTCAAT AAGGGCACCA AAGCCATTCA 120  
ATGTATAATA GAGAAGACAG TTTTTTCAA CAAACAGTAT TGGANCAGTT GNNCNNTAC 180  
AAAAAGTAAA CTTCANCCCA TACCTCACAC TATATCTAAA ANTTAGCATC AAATGGNTN 239

SEQ ID NO:4663

LENGTH:68

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05529

SEQUENCE DESCRIPTION:

GATCTATTAA GTCCTACAAA TCAGGAGTGG TGTAGAGACA TCCAAATTAA AAGAAAAAAA 60  
AACACAAA 68

SEQ ID NO:4664

LENGTH:122

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05531

SEQUENCE DESCRIPTION:

GATCGAGTT TAAATTGATA GGAGGGAACA TGTCTTAATT CTNCTGTCT GAGAAGCATG 60  
TAATGTTAAT GTTATATCAT ATGTATATAT ATATNTNCNC TATGTATATA CATATATNTN 120  
AN 122

SEQ ID NO:4665

LENGTH:196

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05532

SEQUENCE DESCRIPTION:

GATCAGGGAC GGGGCTGAGC TGGAGAGTGT GCAGGATTGA TTAATGATGT CTGCCACGGT 60  
CAGGCCAACT GCTGTCTTC TGCCCCAC AAGCTAAAAA TGTTGGAAA AAAATCAAAA 120

01444

2153480

CATTAATATT TGTGACATAT GAGAATGCTA TGAAAGTCAA CTTTGCTATC CATAAATAAA 180  
GTTTTATTGA CATAAA

196

SEQ ID NO:4666

LENGTH:316

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05533

SEQUENCE DESCRIPTION:

GATCAGATTG CTCAACTCCA TTATAATTG TTTCCAAACT AATCTGTTCA GGCAAGATAA 60  
AGATATAAAT GTGGATTGTT GCTGAGGTTA AGTCTGGTCA GATTTTNCCA NTTATGCTTG 120  
AAAAGTAACC ATATTCAT CAAATATATA ATATGTATAT NTCATAATAA TATANGCAAT 180  
ATTAGTCTCA TTATTAATTG AAAANTCTCA TCTATATTTC ANCAGTGTAG AACATTATTA 240  
NNTGANTAAN TGACCTATAA NTATTTGGTG CCTGANGAAG TCACTTGCT ATTANTNATA 300  
CGGTGTAGNG TGTGGN

316

SEQ ID NO:4667

LENGTH:168

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05534

SEQUENCE DESCRIPTION:

GATCTCAGGG AAGCCTGGGA GTCCCTTCTC ACCCCTCAAC CTCCGGAGTC CAGGAGAAC 60  
CGTACCCCCA CAGAGCCTTA AGCAACTACT TCTGTGAAGT ATTTTTGAC TGTTTCATGG 120  
AAAACAAGCC TTGGAAATAA ATCTCTATTA AACCGCTTTG TAACCAAA

168

SEQ ID NO:4668

LENGTH:311

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05535

SEQUENCE DESCRIPTION:

GATCATCCCA TCCTTGACCA CAGGGACAAG AGGGGCCCCC TCGCCCCAGC CCCACCCAC 60  
ATGGAGCTCA GGGGGAAGCA GGGAGGGTT CCCAAAAGAG CCCTGCAGGAG GCTAGGAGTG 120  
GTTCTTGATG CTCACCTGAA GCCCCTAGAC GCTGCTAGGA GGGGGGGCCC TCCTGGGCC 180  
NAAATACCCN TCCGCTTGCC GCTGCTAGCG NACCCCTGCA GTCCAGCGTG CATCCACCC 240  
ACGNACGTCC CGTGCTGTGT TCCTGGGCN TGTCATGGC CTNAATAAAC TCTCTGCTTG 300  
GGTGTGACAA A

311

SEQ ID NO:4669

LENGTH:167

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05536

SEQUENCE DESCRIPTION:

01445

2153480

GATCGCAAGC TGTTGATGCA CAGGCCTT GTGGCAAGC CCAGCTTCAG TTTATGTTAG 60  
ACAATCAGTA CACATGCTGG TGTGTTTCC AATGCCAGT NATAAGAAAT TAAATAAGTA 120  
TTTGTGAGAT TTGCTATTT TTAATAAAGT AATTNTTTA AATTAAA 167

SEQ ID NO:4670

LENGTH:118

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05538

SEQUENCE DESCRIPTION:

GATCTCATAC TTGTATAGAG TAATAACAC AGTTGTACTT CCACCAAAGG CATGTGGCAT 60  
ATTACCAAT GTCATGTATT CTGAACAAAG GCAAAAAATA CAAATCCTA CCATTA 118

SEQ ID NO:4671

LENGTH:311

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05539

SEQUENCE DESCRIPTION:

GATCCTTCAA ATAGGCCCTG AGATGTGAGG TCTGCTGCTT CACTGGGCC CGATGACTTT 60  
GGCTGGGGGA GGGGGCCTAG GGCTCTNCTC ATTGAAAGCT CTGCTTATA CAGACCAAG 120  
CATACACACC AGGCCGTAC TTTGGGTCTC GGCTATAAGTT CAGAACAAATT CAAGTCCATG 180  
TGTCCCATGG CTGGTCAGAG CCCTGGTCA AAACCACTCA GCCCAGGGGA GGGGATGAGG 240  
CATTGTCACC CTAGACCCCT CTTCTCTCT CCCNCACCAT AGTGTGCAAT AAAGTGTCTG 300  
TTCTTACCAA A 311

SEQ ID NO:4672

LENGTH:338

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05540

SEQUENCE DESCRIPTION:

GATCTTGTC GAGCTGCACC TCTCTGTGAA CTGGCCATTC CTTTCGGTGC TGCTGTCTT 60  
TTTGGGGGGG TTCCTGATT CTGTATACAT GTAGCTTGC CAGATATGTA CTTAGTAATA 120  
TAAACTGTAT TAATAAAATC CATTACTGT GTAATACACG AGTTAAAAAA TTAAGAGCGA 180  
TTAGCTGTC ACTTTGGTAA CAGGTAGTTA AGTGTACAC AAGGTGTTGT TGCAATGGCA 240  
TGACGGTGAC CTGTTGGNGG NACTAAGCCT TACAGCAAGG CATGTGCCGN ACGTGCTCCG 300  
TGGTACTTAG AGCCCTGGGG GCCCGNTCG GACTCCGN 338

SEQ ID NO:4673

LENGTH:117

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05541

SEQUENCE DESCRIPTION:

01446

GATCTGTTA CAAGGTTGT AGATACTTT TTTGTCCTG TTCAAGATG GGAAGCTTCC 60  
 TTATAACTGA TGCAGAGAAA AATTAGTCCT TCAAATACTG CTGTATTTTC AGGAAAN 117

SEQ ID NO:4674

LENGTH:279

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05544

SEQUENCE DESCRIPTION:

GATCAGTGT GCTAGTAGCT TGGCAGCTCT TCATAAAAGC ATATTGGGTT GGNAAGGTGT 60  
 NTGCNTATTT TTCAAATNAT TTAATAGATG TNTGGTACCA TTTAAAAGTG GTTGTGTCTG 120  
 AATTTACTGT GGGGATAACA TACACTGTAA TGGGGAAAAAA TTACCTAAA CCAATTCAA 180  
 AANGGCTTC TNTGTATTC AGTTAAAAAA CCCAGTGCAT GATNCGCCCT CTGGAGATGC 240  
 AATAAACNCC TTNGTGCCAA AGGNGATTGC CNGNGGAGN 279

SEQ ID NO:4675

LENGTH:137

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05545

SEQUENCE DESCRIPTION:

GATCTGTAAT AAAATAGTAT ACTGGACTGT GCATCAAAGG GATGTAAT TACAGTATTTC 60  
 CAAAGGTTGA AGTTCTGCTG TTTGTTATA ATGCCTGATA CACATCTTGA ATAAAGTCTT 120  
 AACATTTNC TTATAAA 137

SEQ ID NO:4676

LENGTH:259

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05547

SEQUENCE DESCRIPTION:

GATCATAAAA ATTAAAATGT GAATGTCAAC AATAAAAAGC AAGACTATGA AAGGCTCAGA 60  
 TTTCTTGCAG TTTAAAATGG TGTCTGAGGT TGTNCTATTT TGGCCAAGTC TGTAGAAAGC 120  
 TGTCAATTGA TTTTNATTAT GTAGTCATC CAGCCCTTGG GCATTGTTAT ACACCAGTAA 180  
 AGAAGGCTGT ACTCAAGAGG AGGAGCTGAC ACATTCACT TGGCTGCCTC TTAATAAAC 240  
 TGANTGCAAG CATTGGAAA 259

SEQ ID NO:4677

LENGTH:261

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05548

SEQUENCE DESCRIPTION:

GATCATCATG ATGAGTTTG CCTTATGCCT TGAATCTTNA GGTTAATAGT CATAAAATCC 60.  
 CTGCTTTCTA AATTGCATT TTTCTGGTG TACCNNTAAT GTGAACNTT TGGCATTCTT 120

2153480

CTGCAATNTT CTGATTGGAG ATTGCATTT GACCTAGTCT GTAAGTTTT CTGTCAGAAG 180  
AGGACTTCA TCAACTTCA NGGNAAGATT GTTATTGGC ATACTGTAAA GTTAAGTNAN 240  
GCANTTNAA AGTNGTCTAA A 261

SEQ ID NO:4678

LENGTH:183

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05551

SEQUENCE DESCRIPTION:

GATCCGATT TACCTTGGAC CCCTGCGTCT TGCCCCTGGG AACCCANATG GGGACTGCTC 60  
TGAACCTTG GATGACATNT GTGCCCGG AGATGTTCTC AACCCAGGGG TGCCCTTCGT 120  
AAATGTTNCT CCATCCTCAC TGTACCAGGA GTGTGTGAAT AAACACAGAC CCCCTCTGTG 180  
AAA 183

SEQ ID NO:4679

LENGTH:234

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05552

SEQUENCE DESCRIPTION:

GATCCCAGTG ACGTGGAAAGT CATCAGAACCCAC CGACGGTACT TTGAGTACCT CTCTGCACCA 60  
AGATAGCTGA CTGNTTTCT GCTCAGTCAC AATTTACTT GNAAGCAAGN ATTGTCCTAG 120  
NTCCTNTTCC ATTATCCAA AACGTTAAC GTCAAAGCA GGGTCTCATT AAAANCCCAA 180  
CTACTGGTTG ATATAATTGA GATATTACAA TTTCAGAATA AACATTTGAT TAAA 234

SEQ ID NO:4680

LENGTH:316

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05553

SEQUENCE DESCRIPTION:

GATCAGAACATC TTCAAGAAC AGTTAGGTTC CTCACTGCAA GAAATAAAAT GTCAGGCAGT 60  
GAATGAATTA TATTTTCAGA AGTAAAGCAA AGAAGCTATA ACATGTTATG TACAGTACAC 120  
TCTGAAAAGA AATCTGAAAC AAGTTATTGT AATGATAAAA ATAATGCACA GGCATGGNTA 180  
CTTAATATT NCTANCAGGA NAAGTCATCC CTATTCCTT GTNTTACTGC ACTTANTATT 240  
ATTNGGTTGA ATTTGTNCAG TATAAGCTCG TNCTTGTGCA AAATTAANTA NATATTNCTC 300  
TTACCTNATA NCANAN 316

SEQ ID NO:4681

LENGTH:304

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05555

SEQUENCE DESCRIPTION:

01448

2153480

GATCATCCTG GAATCCGACT CTGTCTCAGC TCAAGGGGGT TCNGAGATT CCTAAGCTAG 60  
CCCTCTCATT TTACAGCTGC AAAAACGGAG GCCTGTTAAT TCAGTCATT TATGAAATCC 120  
TTTGAATTT TTATTGAGCT CTAATTGTGT GTGAAGTATT ATGGAATGCT TCTGTAATGG 180  
AATGCATAGG TTGAACAAGA CAGAAAGGCC CAGATGGCAG AAGTTCAAGA NCTTCACCA 240  
ACCCATATAG NGAACCTAGT AATATTAATG ACTAATGTTA ATGGANTCCA TGCTTGTTA 300  
CGAN 304

SEQ ID NO:4682

LENGTH:287

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05556

SEQUENCE DESCRIPTION:

GATCAAATCG GAGTACTTAG CATATCTATC ATCTCGTGCA TTTATCATT CTTTGTGGCG 60  
AGAACATTTA AAAATCCTAT TTTCTAGCTA TTTTGTATA TACACTACCT TACTGTTGCG 120  
AACCATACTG ACCCTACTGT GCAATAGAAC ACCTGAACCT ATTCCNCCTA TCTAGTTGTA 180  
ACTTNGTACC CATTGNCCCC CCNTCCCTNC CTTCCACTCT CCCCTCCCCA GNCTCTGGTA 240  
ACCACTGTTG TGTTCCCTAT GAGATAAAAC TTTTTTGNC TTCCAAA 287

SEQ ID NO:4683

LENGTH:298

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05558

SEQUENCE DESCRIPTION:

GATCTTTGA AGATTGCTGG AATACTGGTG TCTGTTAGAA TGCTTCAGAC TACAGATGTA 60  
ATTAAAGGCT TTTCTTAATA TGTTTTAACC AAAGATGTGG AGCAATCCAA GCCACATATC 120  
TTCTACATCA AATTTTCCA TTTGGTTAT TTCATAATC NGTATTGCA TTTGCCTTC 180  
CCTGTTCATCA CCTCAAATTG ATTCAATCCT CAGTTAATT CAGAGAGGTC AGTTAAGTGA 240  
CGGATTCTGT TGTGGTTGA ATGCAGTACC AGGNTTCTCT TCGAGCAAAG TAGACTN 298

SEQ ID NO:4684

LENGTH:297

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05559

SEQUENCE DESCRIPTION:

GATCCATCTT CCTTACACTC CTTCCAAAT AATGTTAATA CTCTGTCTAT CAAATGCTTA 60  
CAGTGTCTC TAGCACATAT AGGGTAAAGT CAAAGCTCAT TAGCAGGGCA TAGGAGGGCCC 120  
TTCATGACCA GCCTNACNG CACCTCTAGC TACATCTCT ACTGNGNNCA CCTCCACATT 180  
TACCCCTTCGG CATGCCAACC TGCTTATGGT TACGGGGCAC AGCTTGCTGT TTTGGNTNNT 240  
GTGCCTCCCN TTGTTTGCT TCCTGNTGNT GAANTNATGN TGGGACCATT CTTGTGN 297

SEQ ID NO:4685

LENGTH:120

01449

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05560

SEQUENCE DESCRIPTION:

GATCAGATTCTACTGTTTCACTATTTATTGTAATATATT TTTTGTGGTAAATATGTT 60  
ACAAACAAAAT GTGATTGGTC TAAATATTT GTAATGTATA TTAAAAGGTT CAAAAATAAA 120

SEQ ID NO:4686

LENGTH:53

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05561

SEQUENCE DESCRIPTION:

GATCAGAGGA GTTCAGGGAG ACATACATAA AAATGTTAACACGGTTTC AAA 53

SEQ ID NO:4687

LENGTH:363

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05562

SEQUENCE DESCRIPTION:

GATCGCCAAG TGCAAGCACG GCATCGCATC CCCAGGTGTC ATCCGTGAC CCAGGAGGGG 60  
AAGATGACAC ACCCAATTAA GGTAATGCTG CACTTCTNGT TATAATTGGT TATTGGAAAA 120  
TGTGCCTTTA TTATCAGAAC AGTGGTGTGC GCATTTCTGA TTATGGAGCT AACTTTGGA 180  
TATCTGACTT AGATACTAAA AACATTTGGG TGGTGCAGTT TTGCACTTGT AGATACAAC 240  
TAAAAGCATG AAACTGGTGA TTTAATTAGA TGTTTCTAT AAAATGCACC TTGTTACATT 300  
TCTGTGAAAG GGGTCTTACC AGCGTGGAAAT AACNTGGCTC AAGGGTTGA GGGGANANC 360  
NGN 363

SEQ ID NO:4688

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05563

SEQUENCE DESCRIPTION:

GATCCACGTG TACTGGCACC TCAGAAAGACC AAATCATGGN CTGTACAAGT CTCTATACAA 60  
TGTCTTTATC CCTGTGGGCA GNANGCAATG ATGATAATGN CAANCAGGN 109

SEQ ID NO:4689

LENGTH:369

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05564

SEQUENCE DESCRIPTION:

GATCAGAAAG CATTCAAGTCC AGTCAGAATT CAAGGTGGGA AAAGTAGGTG TATTTCTGAN 60

01450

2153480

CCATTTGGGA AGGAAAATCA TTTTCTGAA CANCACTACC TGCATTTCTG TTTCTGCAGA 120  
CAATCAAAAA ACAAACANT AAAANTAAGT AAGTGAANGA AAGGCCANTT AGCATTATTC 180  
ATTTGCCTTA GGTTTACAGG GTCACAGATT CATTAGCTTA ATTACATCCT CATTGGNT 240  
GCCAAAGAAT GGAGCAAGAG CANTCAGTAT TGCTANCTGG CTCTTGCTTC TTCTTCTGG 300  
GTTTGTGTTG GTTTNCAGA GAAACAGGGGA AGNGAGGGCA TTNGCNNAGT ATAATTGGTN 360  
TATAGGAGN 369

SEQ ID NO:4690

LENGTH:70

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05565

SEQUENCE DESCRIPTION:

GATCATAAAAT GTACTTGCTG AATTCAATCA TTTTAACAA GCCAATAAAAG TTTGATAATT 60  
CATCTCCAAA 70

SEQ ID NO:4691

LENGTH:293

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05566

SEQUENCE DESCRIPTION:

GATCCTCAAG GCCTTGCTCT NCCCCGTGGA GACGCTTGCT CGGATGAGCT CAGGAAACAG 60  
TACCGGCTGC GTGGCAGGTC TGGGTGTTGT GTGGCAGGAC GTGGCCTTG CACACCGCTG 120  
TGTTCTCAGA GGTCTTAGG AGATATTTT TTTTGCTTA GGGGGACTGT NTTAAGTTCA 180  
GACAAATCAN GCTGGGTGTG GAGAGAGTCT GAAATACGTC AGTGAAGTAA GTAGCAGTGA 240  
GCGATTGTGA ATTTGNANTN TAAATGGAAA ACCGGGTTT TACCGGNGTT TTN 293

SEQ ID NO:4692

LENGTH:251

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05567

SEQUENCE DESCRIPTION:

GATCAAACTC TTCATTGAAG TACTCATNAG GCGTGATGGC TGTGGGGTTG TTTGCAGTAG 60  
CACATTNCGT GGTGAGGTCC TGCTGAGCCA GNACTCAGGA GAGTCAGAAA TGCCAAANNN 120  
TGTCACAAG TGAAGGCCTG TGGCACTCAG TGTCTGAGGT GGACGTGTTA ACCAGCTAAA 180  
GACCGGGAAAG TTCTATTACAC TAACTTTTT GCATGGAACA AGAAAATCTA TGAGGGATATC 240  
ACCAAACCAA A 251

SEQ ID NO:4693

LENGTH:97

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05568

01451

2153480

SEQUENCE DESCRIPTION:

GATCCATCTT GCTTTGCCT TATATAAAGA CTACAGTTAT GGAAGTNTGG AAAACTGTGG 60  
CTTCTCAATA AATATTCAAGA TGTCTTAAGA NTATAAA 97

SEQ ID NO:4694

LENGTH:106

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05570

SEQUENCE DESCRIPTION:

GATCTCACAA AGTACAAAAC GAATGCCCTT CTTTCTTGT TTATAATGGT CACTCACTGT 60  
GTTTGGTTAC TGTCAAGAAA TCAATAATG TGTTAACAA GTTAAA 106

SEQ ID NO:4695

LENGTH:106

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05571

SEQUENCE DESCRIPTION:

GATCAGTNGA TATTAAGATG AGATTACAAA TTTNTTAAG TTCAGCCATT ATTACTTTG 60  
GTATCCCAGA ACATGACAAA TTATGAATAA AACAAAGTATA CATAAA 106

SEQ ID NO:4696

LENGTH:149

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05572

SEQUENCE DESCRIPTION:

GATCCATAAA ATTTTATAA TCAAGATATC ATATTAAAGT ATTATTATAT TAATTTATGA 60  
CACCAAATTT TTAAACCAAT TTTATGTTT TCCTTATGTA TCATTATAAA CCCTATTGCA 120  
TTTATAAGT AATANANTAT TTNAGAAA 149

SEQ ID NO:4697

LENGTH:356

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05573

SEQUENCE DESCRIPTION:

GATCGCGAGC GCTGGTTGC ATGCCAGCT TCTATATATT ACGGCCTTT TTTTGCTGG 60  
ATATTATCTT GTAAAACGTG AAGACTACCT GTATGCTGTG AGGGACCGTG AAATGTTGG 120  
ATATATGAAA TTACATCCAG AGGATTTCC TGANGAAGAT AAGAAAACAT ATGGTGAAT 180  
TTTGAAAAAA TNCCATCCAA TACGTGAAG TCTCAAAAT GCTTGCTCCA GTTTCAGTGA 240  
TACCTGCTGT TTCTGAATTG GNTGGGGCAT GTTCTTATG GCANTGGAG GCTNATTGNT 300  
AATNTGTATG TTGGCACCTT GTNATTAAAA TACGGGGCCA TGNNNAAAAA AAAAAA 356

01452

2153480

SEQ ID NO:4698

LENGTH:190

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05574

SEQUENCE DESCRIPTION:

GATCCACCTG CTTGGCCTC CCAAATGTTG TGTCTTTA AAGTATCTAC AGTAACCTTG 60  
TATCAACTTA GTTTGTCAGT CTATAATAC TAAATTAGC TCCTCAAAG CAGTTGGAAC 120  
TATGTGCTAC ATAAATTCA GTTCACCCA AGGAAAGAAG TGAAATTAGT GAATAGACAG 180  
TTACAGCAAA 190

SEQ ID NO:4699

LENGTH:81

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05575

SEQUENCE DESCRIPTION:

GATCCGNTCC CAGACGGCCT TGGACTGCTT GCATTTCCCC GGAGAAAAAG GGGTTAATAA 60  
ATGGGCCATC CTTTCCTGAA A 81

SEQ ID NO:4700

LENGTH:89

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05576

SEQUENCE DESCRIPTION:

GATCACTGTG GGGTCAAGAA TGTCTTACAT GTTTTATTCA TCATTCTTGA NGGAAGAAAT 60  
AATTCAAACC TTGGAATTAA AAAGTCAAA 89

SEQ ID NO:4701

LENGTH:311

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05577

SEQUENCE DESCRIPTION:

GATCTGGCA AGAACCTCA ATCTCCCTCC AGAACAGTG GACTCTCTAA AAAATATCCT 60  
GACTTCTAA AACATTGATG TNANGAAAAT GACGGTCACA GACCAGGTGA ACTGCCCAA 120  
GCTCTCGTAA CCAGGTTCTA CAGGGAGGCT GCNNNNACTC CATGTTACTT CTGCTTCGCT 180  
TTCCCCTACC CCACCCNCCG GCATAANGNC ANACCAATCA ACCACGACAA AGGNAGTTGA 240  
CCTAAACATG TAACCATGCC CTACCTGTGTT ACCTTGTAG CTGCAAAGTA AACTTGTNGC 300  
TGNCCCTGCAA A 311

SEQ ID NO:4702

LENGTH:94

TYPE:nucleic acid

01453

2153480

TOPOLOGY: linear

CLONE:HUMGS05578

SEQUENCE DESCRIPTION:

GATCTCTCTT GCACGGCCT TGCCAAGGCC CAGGAGGGAC TTGGGCAGTA TGTCATGTG 60  
GTCATATGTT TTTGTAAAAA ATTGTGAAAG TAAA 94

SEQ ID NO:4703

LENGTH:248

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS05579

SEQUENCE DESCRIPTION:

GATCCGAATC CGACTGTGGG GGGCGGGCTG GGAGGTGGGA GCCGCGTCTC AGGCCCCGCC 60  
GTTATCAAGG CCCCTCCGCC CCCGAACCCCT GGGGAGCTGG ACCAGGAGGT GGAGGCTCAG 120  
GGGACCCCAT GGGGACAGGC AGAGCTGGTC TCCTCCCAGC AGACGGAGCC AGGACGGGCA 180  
CAAGAGTCTT GGAGGTTTGC GTGTTCTGC TAGAATTAAA AAGTTAAATT TAAAAATGAA 240  
AATGNAAA 248

SEQ ID NO:4704

LENGTH:66

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS05580

SEQUENCE DESCRIPTION:

GATCAGCAAA GTGAGACAAA AGAAGATACT TCCCCAAAGA AGAAAAAGAA AAAATTGAGG 60  
CAGAAA 66

SEQ ID NO:4705

LENGTH:65

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS05581

SEQUENCE DESCRIPTION:

GATCGGGTCT CGGAAGGGAA GTAGCCATCA CACCATTAAA AAGCCTGTGG ACCTTAAAG 60  
GNAAA 65

SEQ ID NO:4706

LENGTH:308

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS05582

SEQUENCE DESCRIPTION:

GATCTTCTTA GGACATCTT TTTAAAAGC TGTTTAGTAT CATTGGTGT ATATTGTTA 60  
AATGCTTTT CATCAATAGC AGTCANCATT TTATCCTTTC TTTTTATATT CATAATGTTA 120  
TTTAAGTGTC ATTGATGTAC TGTATTGACT TGGGGTTTGC TTATTTGTTA CTTAACATGT 180

01454

2153480

GTACATGCAT GAAAGCATT TTNGTTGTC CCTGATAGTT ACATTTCAAC CTTGGGATTT 240  
TNCCAAATNA CTTAAGANGT TTAATGTCAG TNAAAGATTN TNTTACCCCTC NTTTGGA 300  
CATCAATN 308

SEQ ID NO:4707

LENGTH:323

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05583

SEQUENCE DESCRIPTION:

GATCCGGAAG ACCACGGCCA GCCAGGTGTA CGAGACATTG CTCACCTACA GTGACGTCGT 60  
GGGCGCGGAT GTGCTGGACG AGGTGGTGAC TGTGCTCAGT GACACTGCGT GGGACGCGA 120  
GCTTGAGTG GTGAGAGAGC AGCGCAACCG TCTGTGTGAC CTTCTGGCG TACCCAGGCC 180  
CCAGCTGGTG CCCCCAGCCTG GTGCNTGCTG AAGCCAGTCC TTGGAGCCCA TANCTCACCC 240  
CTGCCTGGTG AGGATGTCTT GTTCCCTGAG GGTAGGCCGG TTGTGGAAAA GCCTCANNAC 300  
NAGTGNNTGCC TNNAGGCTGN GAN 323

SEQ ID NO:4708

LENGTH:302

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05585

SEQUENCE DESCRIPTION:

GATCTTCCTT TGGAACCAGG CACATTTGGC CCCTTCTCAG TGACTGCACT GTGGAACCTCT 60  
TCTTAAGAAA ATATTGAAAAA CAGCTTAATG CTTTCATATA GTGACCGACA TTTAGTTGAA 120  
AACTACTGCT GCATAGCAAA TATTGTGACT CTTCATGTGT CCACAGGAGC TCTTGTGTGG 180  
GTTTAAAGCT ATGAAGTGTA TTCACATTGT GAAGTTTAA TTATCTTTAT TGAAATTAAT 240  
TGTGTAAAAA TGGTATGTGC TCTATTAGGT ATTCAAGTTG TATGTGAATT CTATAAAGAA 300  
TN 302

SEQ ID NO:4709

LENGTH:302

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05586

SEQUENCE DESCRIPTION:

GATCCCTCTC AGCTACTGGG AGCTGCTTTG TGCCTTGGAA GCCTCAAGCT GAAATGGATG 60  
TCAGCCTCAA GTTTAATCCTC AAGAGGGTTC ACCTTGTTC TTTGAACAAA ATGTGCTGCC 120  
TGTTGCTTCC CTTTGCCAGG AGTGGTGTTC CCTTTCCAC AGGTCTGGAC CACAGTGTCT 180  
CTAGCTCCCG CTCCCTGGATA CTTGGTTACT GTGTGTTCG GGAAAAAAGG ATNCACAAACA 240  
TGAATATNCA CTAAGCTGTA ACAGGGCCT GCTGCANCTA TACTATTCC TGAAAAAGTA 300  
TN 302

SEQ ID NO:4710

LENGTH:161

01455

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05587

SEQUENCE DESCRIPTION:

GATCTTGCTT CTTTCCTCCT TCATGAAAGC AGCACACATT GTGTTAACCTT ATGTCTCTTG 60  
 TAAATNAGC TTAATGTCTT TGTGTTTGT CCAAAACTGT ATTGNNNNAA TATTGTTAA 120  
 TGCAAATNAA GGAATGCAAT AAAGAGTAAA TATACTTGAA A 161

SEQ ID NO:4711

LENGTH:120

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05588

SEQUENCE DESCRIPTION:

GATCAGAGCG TGGGAGGAGG TGGGGGTGGA CGTCCATCCG GTGAACAGTG AAGGCCTTG 60  
 TGAGGTCTTT CTGGTCCCAG CATGAAATAA AGCCTTGGCC TGGGGGCCGC TTCATTCAA 120

SEQ ID NO:4712

LENGTH:297

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05589

SEQUENCE DESCRIPTION:

GATCTGGCAG TACCCAGCCC TTGTGTGTGT GCGTTANTCA GCACCTGCC ACAGTGCAG 60  
 CCCCGTAGG ATGTGCCCTTG TCCTTCCCTG TTTCAGCACT TAACACACTA CCTGGTACAG 120  
 AGTATGTAGT GGGCATCTGT TGAATGAATG CTTTCCAG TAGCAGTGTATTCATACAAT 180  
 ATTAATATAA TTGTCCCCCTG GCTTACAGAT ANAAATGAAA GCATCAAGTG CCCAGTTGAG 240  
 TGAGACCCAG GTGTTCTTCC TNCACCCCTT AGTGGTCCCC CTGGGGCCAG NTCTTN 297

SEQ ID NO:4713

LENGTH:67

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05590

SEQUENCE DESCRIPTION:

GATCTCTCGG CTAGGTCGTT TACCGCTATT TATTTTATG GGGAAAATAA AACTCTCAA 60  
 AATGAAA 67

SEQ ID NO:4714

LENGTH:50

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05591

SEQUENCE DESCRIPTION:

GATCACTAGA TGATTCTAAC ATCGAAATAA ACCTCTTTT ATATGGCAA 50

2153480

SEQ ID NO:4715

LENGTH:233

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05593

SEQUENCE DESCRIPTION:

GATCTGGTGC GTGTGGCCCT GTGGGAGTCC ACTTTCTCT CTCTCTCTCT CTCTGTNCCA 60  
AGTGTGTGTG CAATGTCGCG TTCATCTGAG GAGTCCAAA TATCGAGTGA ATTCAAAATC 120  
ATTTTTNTTT TCCTCCTNT CAATGTGATG GAATGAACAA AAAGGAAAAAA ATTCAAAAAA 180  
CCCAGTTGT TTTAAAAATA AATAAATANA GCAAATGTGC CANTTAGCGT AAA 233

SEQ ID NO:4716

LENGTH:282

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05595

SEQUENCE DESCRIPTION:

GATCTGCCT TGAGGAAGAC CCAGGCCATG TTCCCAAAGG NCAGCGGGGG CCCTGGATTG 60  
TAATGCAGCC TCGGGACAGG GCTGAGGCCT GCGGGGGAAAG ACCTATACCC CACGACTGGG 120  
CCTGGNTTCA CCTCACCTA ATCCCCGGG AGGAGCTGAC TGATGCAAAA AGCTGAGGNN 180  
GCCTGCTGGG NNNTGGCTGT TTTNATGNCC CAGCCCCGNN AAGTTGGGA GTGTTGTGG 240  
GGGTNCAGAG CCCTNCCCCA GNCAGGAGAG AACCTTCCTN TN 282

SEQ ID NO:4717

LENGTH:80

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05598

SEQUENCE DESCRIPTION:

GATCTAGGAC TAATTCAAGG GTCTAGATT ACCTCCAAAC TTTGTTTATC TACAAAAAAT 60  
AAAACTCTAT CTTCTTTAAA 80

SEQ ID NO:4718

LENGTH:204

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05599

SEQUENCE DESCRIPTION:

GATCCTTCCC CTCTCAGACA CCCCTCTTTC AGCTTAGAAT TTGGGGACC TATAGAGAAG 60  
TCACAGAACAT CCATGAAAGG GAATGGGGCA GGAGCCAGGG GTGTTTTNC CCAGTGCAGG 120  
GTTGTGTCTT TGTGTCTG TCTCTGTGAC TGTAAATCCT GCCCTGCCCC ACTCCCAATA 180  
AAAGCTTTGG TGTATAGGCT CAAA 204

SEQ ID NO:4719

01457

2153480

LENGTH:83

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05600

SEQUENCE DESCRIPTION:

GATCAGTTG TTTCTTCTG TGCTGGTAAC AATAAGCGTC GCACAGACAT GGTTTCAGGT	60
AANTAAATCT ATTCTATGAT AAA	83

SEQ ID NO:4720

LENGTH:289

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05601

SEQUENCE DESCRIPTION:

GATCTCTGGGA TTGTGTTATG TCAGTGGTGG TAGGTTAGGA ACTAGATTTC CCAGAATCCA	60
TTCCATTTGT NATTCCATGA TACAATTGAC CAGTAACCTA TCTTACATGA GATTGGAAG	120
TAAGTTAAGA AGGCATTAGT CATGGTTGG AAGCACCATA CAGGGAGACA GCTGTGTGAA	180
TACAGGCTGT ATGGACACTT GCTTCCATCC CATTNNCCTG CTTCTTGAG TTGCCAATCA	240
AGTGTATCCT CAAAACGACT TGACTTTAAT TTTCTCGGAG GTGATAGTN	289

SEQ ID NO:4721

LENGTH:235

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05602

SEQUENCE DESCRIPTION:

GATCAAGTCT TACATGCCCA TTCAGCTTCT AGGCCCCCT CACCTCCCTG CCCTCATTCA	60
CAAGTGGCCC TGAGACACGT GAACACCTCC CTNCTATGCA TCACAAACCT TCTCCACCGA	120
GCTTGGTGC TTTNGCCTCT GGNACACCTA ACTAGCATTG GCAGAGGAGA GTCTACACTC	180
TNTTNCTNAT TCAGGGTNGA TGCTTTAAGA AATNCTGNCT CTTGTGNANG CAGAN	235

SEQ ID NO:4722

LENGTH:276

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05603

SEQUENCE DESCRIPTION:

GATCGTCAGC ATCATCGGAG GCATCAGTTC CTTCTTCATC TTCACTTCC CAGGTTGTG	60
CCTCATCTGT GCAATGGGTG TCGAGCCTAT AGGACCAAGA GTCAAGTGTG GCCTGGAGGT	120
CTGGGGAGTG GTCTCTGTGC TGGTCGGCAC CTTNATCTT GGGCAGAGCA CGGCAGCAGG	180
GTCTGGGAGA TGTTCTGATG GGCAGCCAGT GCCGGGCAGG AAGGGGCCCT CCAGGGGCTG	240
ACCCTACGTG GCTGCTGTAT GCAGNNNGGA GANCAN	276

SEQ ID NO:4723

LENGTH:278

01458

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05604

SEQUENCE DESCRIPTION:

GATCAAGGTC ATAGAAAGTG AAGATTATGG CCAACAGTTA GAAATCGTAT GTCTGATTGA 60  
CCCGGGCTGC TTCCGAGAAA TTGATGAGCT AATAAAAAAG GAAACTAAAG GCAAAGGTTC 120  
TTTGGAAAGTA CTCAATCTGA AAGATGTAGA AGAAGGGAGAT GAGAAATTG AATGACACCC 180  
ATCAATCTCT TCACCTCTAA AACACTAAAG TGTTTCCGTT TCCGACGGCA CTGTTTCATG 240  
TCTGTGGTCT GCCAAATACT TGCTTAANCT ATTGGAN 278

SEQ ID NO:4724

LENGTH:280

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05606

SEQUENCE DESCRIPTION:

GATCTGGAAT GCNACGGGAG CACTTGCTCT GAGGAATCCC AGGGTGACTC TGTCGGGGAA 60  
GAATCCGGTC ACAGCCTCCC CTCAGAGACA GGCCCTCANTT CGAGGGCAGC CCATTATCTG 120  
TCGCAGCATC TGCCATGTCC CTNAGACTGC GGGAGGCAGG GNATGCATGG GTGTCCCCAT 180  
CTGTCCCTGG TGAGAACGCAA GGCTAGCTCT GCCTTCCACA TGCTTNNTAG GATGCCAAGA 240  
GGCCTAGGAA CCCAGNAACC CCCTTGNGAG GAGCTGTGNN 280

SEQ ID NO:4725

LENGTH:253

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05607

SEQUENCE DESCRIPTION:

GATCTGCATT CACCTTAGGG CTTAGCCTCT NATTATGA ATTTTCAGGC TGTGATTNGT 60  
GTTGGATGGC TAAGNTCTAA GATAATGCAA ATAGCCCCAA TCTTTAAATA TAGCGGTGCT 120  
AAGTTGAACA NGTAACACAN TACAGAAAAT GCTGATATGA ATACTTAGTA ATAATACAAA 180  
AGTTCCCTGCT AAATTATATA TGTGTATCAC TGCCCTGNENN GANACCCAC TTNNTTTC 240  
TAATCCAGCN CAN 253

SEQ ID NO:4726

LENGTH:301

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05608

SEQUENCE DESCRIPTION:

GATCCAGATA GCCTAGGGTG AGGGTGACAG AGGGACAGTG GGCTATGCCA CTAGGCCCTG 60  
GTCTGGCTTT GGAAAGACCT NTGAGGGGAA ACCTTCACCC AGCACCCATG CCCCACCTCTG 120  
CTGAGGCCAG AGGAAGGGAG GCCTGAGGGG CAGATTNGTT CATGCCCTGGG GTGGAGGCTA 180  
AGCCTGGACA CAGTCAGGGC GGGGCTGGCAG AGCTGTGCGA GAACACAAGC CACGCCCTGCN 240  
ATGGTGTGCT ACCCCTGGGT GTCCCTGCCT TGGCCCTGCT CTGGTCACCT CAAACATNGT 300

01459

2153480

N

301

SEQ ID NO:4727

LENGTH:295

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05610

SEQUENCE DESCRIPTION:

GATCATAAAA CAATAAAAGT AGTTTCTAA TGTTGCTCAT AACTGGGAC TGAAAATCAT 60  
TTCAAATCCA GGAGACAGTC CAAAAATGGT TATTGAGCAN TGGCCACATA TTGGAATAAA 120  
AATTTTNATT TTCAGTCTGT GTTTGGGAA AACAGCATT CATGCATAG GTGGATAAGT 180  
NCTAGAACAT TGGCTAANCA TATNGTCATT TGCTATAATG CATATGCATT NCAGAAGTTT 240  
TCTNGCTCCT GANGTATNAT GGGGGTTTT CTAGCTCCCN TATNGCNAAA ANTTN 295

SEQ ID NO:4728

LENGTH:99

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05612

SEQUENCE DESCRIPTION:

GATCACTTGA GCCAGAGGTT AAGTCTGCAG TGAGCTGTGN TTGTACCACT GCTCTCCAGC 60  
ATGNGCAACA GAGCCGGACC CTGTCCTCACC AAAGNCAAA 99

SEQ ID NO:4729

LENGTH:329

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05613

SEQUENCE DESCRIPTION:

GATCCATTGT CGGGAGCTTG TGGCACATCA CCTTTCTACT CTGCAGTCTT CCCTGCCTCT 60  
NAATTCCGTT TATGTCTACC GTCCCCCTCAA GCACACCCCTG GTGACCTGTG ACAAAAGGAGT 120  
GTTCAAGATTA CATCCCTCCT CTGTCCTCAGG CCCAGACTTC TCCAAGGACA ACAGCAAGCC 180  
AGAAGTGCCA GTCAGAGGTT NAGTAGCCTT TTACCATCAT CTCCCAGNTG CCAGTGGGTG 240  
CAAGCAGACC TCTACTAAC GNAAAGTAGA GGGAAATGGN AGTGGATGAC TTNTGTGATG 300  
GANTCAAACG GCTCTATAAT GGANGGTTN 329

SEQ ID NO:4730

LENGTH:140

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05614

SEQUENCE DESCRIPTION:

GATCCTGCC CTTCTGGGT NGGTGGNGG TATAAGCACT GCCACCAGAA CTGTTGGGTG 60  
CTAGCTCAA AGCCCAACAC AAGAAATACT ACCAATTATG AAATTACAAC AACAAANTNTA 120  
AATGACATAA TTTTTGAAA 140

01460

2153480

SEQ ID NO:4731

LENGTH:190

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05615

SEQUENCE DESCRIPTION:

GATCCATAGG ACTACCGCAG CCCGGACTCA CCAAACTTGCC ACATGTTCTA GGTTTCAGCA 60  
ACAAGACTGC CAGGTGGTTG GGTTCTGCCT TTAGCCTGGA CCAAAGGGAA GTGAGGCCA 120  
AGGAGAGCTTAC CCAAGCTGTG GCAGCCGTCC CAGGCCACCC CCATGGAAGC AATAAAGCTC 180  
TTCCCTGAAA 190

SEQ ID NO:4732

LENGTH:159

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05616

SEQUENCE DESCRIPTION:

GATCCCAGCC AGGAAGGCTG GGGGCCCTAC TGTTTGTCCC CTCTGGGCTG GGGTGGGGGN 60  
AGGGAGGAGG TTCCGTCAAG AGCTGGCAGT AGCCCTCCTC TCTGGCTGCC CCACTGGCCA 120  
CATCTCTGGC CTGCTAGATT AAAGCTGTAA AGACATAAA 159

SEQ ID NO:4733

LENGTH:295

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05618

SEQUENCE DESCRIPTION:

GATCACAGAC AAGCTGGGCC TGCATTCCCT TCGTCACCGT AACTGGTACA TTCAGGCCAN 60  
CTGTGCCACC AGCGGGGACG GGCTGTACGA AGGCCTGGAC TGGCTGGCCA ATCAGCTCAA 120  
AAACAAGAAC TGAAAGCCAG ACAGCCCTAA CAAAGCACCC CACCCACCCCC TGACATAACCT 180  
ACTGTNACCC TGCCCCAGTC CTACCCCTTC CTCTCCATGC AAGTNTGGCC AGGGCCCTGG 240  
GTATCATGTC CACATGCCCA GCAAGAGCCT TGCCTNCNT TGCCTGCNCT GCTTN 295

SEQ ID NO:4734

LENGTH:295

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05619

SEQUENCE DESCRIPTION:

GATCCACCCCA CCTNGGCCTC CCAAAGTGCT AGTATTATGG GCGTGAACCA CCATGCCAG 60  
CCGAAAAGCT TTTGAGGGC TGACTTCAAT CCATGTAGGA AAGTAAAATG GAAGGAAATT 120  
GGGTGCATTCTAGGACTTT NCTAACATAT GTCTATAATA TAGTGTTCAG GTTCTTTTT 180  
TTTCAGGAN TNCAATTGGA ATTCAAANC ANTTGGCAAN CTTNGTATTA ATGTGTAGG 240  
TGCAGGNGGN CATTGGTATT CTGGGCACCT TCCTAATATG GCTTTACAAT CTNNN 295

01461

2153480

SEQ ID NO:4735

LENGTH:259

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05621

SEQUENCE DESCRIPTION:

GATCTCAGCA ACAGCTGGGT AATAAGACTA GCATAGCTCA AACTATCCGT CCAAACGCTC 60  
TCATCTGATT TTNCCCTCCCT TCTCCCCAA CCTCCAATCA CCCTGAGTCA CCTGTAAATN 120  
CATTTGTNAT TCAAAGCGGA ATAACANGTT GTCCCTAGCA NNNCCGCTGA GCGCTTTATA 180  
ATTTNTGGT GTATTTTGTT NAGTAGGTAG CAGAGGCAGGA NGTATTTTN GGTGTAATTC 240  
TTGANATTT CTGACAGGN 259

SEQ ID NO:4736

LENGTH:232

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05622

SEQUENCE DESCRIPTION:

GATCACTGCA TGTTATGATG GCTTGTAAAGT GCGTTGTTAA GACTTTNTT TCAGTGTGTTG 60  
TNTCCCAGTA TTGAACTTA ATTAAAGAA AAAGACGTT CCAAGTTGTA TTTATTAAT 120  
GTNTTTTNCC TTACCTTTG TNCTGCTACT TNCTAATCT CATTAGCTA GCTGTGTTG 180  
TNCATAGTTT ATATNTGGTA ATAAATNTAT AGAGTGTGTTNG TTGTCATCGA AA 232

SEQ ID NO:4737

LENGTH:138

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05623

SEQUENCE DESCRIPTION:

GATCTGTAAG TTTATTGCT CAATGTACGA CAGCTACATA ATGACTCACAA TTCATGATAT 60  
TCCATCACTG AGGAAACTGTC TAAAGATGGT CCGTGTGTGA AATAATTCCCT TAGAGAAACA 120  
CGGAGCTGGA AAAATAAA 138

SEQ ID NO:4738

LENGTH:135

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05624

SEQUENCE DESCRIPTION:

GATCCAACCTG GACAACGTGT GGGATGGACC TGAAACAAG CACCTCCCCA AACACATCAC 60  
CACTCCCTAG GGCGGGGCCT GTGCATGCTC TCGCATGACA TCTCCATGCT GGTTCTGCA 120  
TAGCATAAAAT GGAAA 135

SEQ ID NO:4739

01462

2153480

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05625

SEQUENCE DESCRIPTION:

GATCGATGTT AAACGTACACA GCAGTACTTT GCTCAATAAA GGTCAATTG GAAACATAGT 60  
CAAA 64

SEQ ID NO:4740

LENGTH:117

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05627

SEQUENCE DESCRIPTION:

GATCTGTGGT AGGGTATTGA GGGATGAGGG AGAAAAACGA CCTAATTCAN GTAGGACTNG 60  
CAACGGCTCC CACCCCTCCCT GGGGACANGG NTTAATAAAA ATTGACATCA CAAGAAA 117

SEQ ID NO:4741

LENGTH:244

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05628

SEQUENCE DESCRIPTION:

GATCAGAAGG GCTGCGTGA GCACCCCTAT GGTCTTGAG AACACACCAA GAAACCCGAC 60  
GGCTTCATA TTTNCTGACC CTACAAACAG GTGCCTAATA CTGATGTGGA GAAAGCTCAA 120  
GAGGGAAATCA TCTGGCCTGA GCCTACCATG AGGCTGTTG TGGTNCTGGC AGAAAAGCAA 180  
CAACTCGCTC CCCTTCCCCAT GTATCACTGA AAACCAATTAT GCAAATAAAAG AGCTGGGCC 240  
CAAA 244

SEQ ID NO:4742

LENGTH:209

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05629

SEQUENCE DESCRIPTION:

GATCTTTTTT CCTCCTCTG TTTATNTTT TGTTTGTGTTT ATTTATAGTC TGATTTAAA 60  
CAATCAGATT CAAGTTGGTT AATTTAGTT ATGTAACAAAC CTGACATGAT GGNGGAAAC 120  
AACCTTTAAA GGGATTGTNT CTATGGTTG ATTCACTTAG AAATTTATT TNCTTATAAC 180  
TTAAGTGCAA TNGAANGNT TTTNCAAA 209

SEQ ID NO:4743

LENGTH:265

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05630

01463

2153480

SEQUENCE DESCRIPTION:

GATCATATAC TGTATATATA AAANNNTGA GATGGTAGAA ACATGTATGA NTGTACTAAG 60  
TAGTATTCCA CTGTACTCAT TCATAAGGTA GGTTTCTTA CAAAACTCAC ACCAGGTACT 120  
TAAAGATGTG CTCTGCTTT TTCCAACATAC GGAGTGTAC TGCTTCTAG GTCAGTCCCT 180  
GCAGACTCTT CTCAACTCTT TCCCTATAGG AACTTACTC CGCGTCCTGC CCCCACCTCC 240  
TAAATAAATA ANGGAATCGG CGAAA 265

SEQ ID NO:4744

LENGTH:177

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05631

SEQUENCE DESCRIPTION:

GATCCCTAAC ATACTGTACT ACTTGCTNT ACAATGTGTT AGCAGAAACC AGTGGGTTAT 60  
AATGTTAGAAT GATGTGCTT CTGCCAAGT GGTAAATTCACT CTNGGTTGC TATGTTAAAA 120  
CTGTAAATAC AACAGAACAT TAATAAATAT CTCTGGTGT GCACCTTTA CTGTAAA 177

SEQ ID NO:4745

LENGTH:377

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05632

SEQUENCE DESCRIPTION:

GATCAGCCGA AGAAAGCAGA AGCTCTGGAG GCTGCCATCG AGAACCTCAA TNAAGCCAAG 60  
AACTATTTG CAAAGNTGA CTGCAAAGAG CGCATCAGGG NC GTCGTTA CTTCCAGGCC 120  
AGACTCTACC ATACCCTGGG GAAGACCCAG GAGAGGAACC GGTGTGCGAT GCTCTCCGG 180  
CAGCTGCATC AGGAGCTGCC CTCTCATGGG GTACCCCTGA TAAACCATCT CTAGAGAGGA 240  
CATCCCTGCT GGGCTGCTGT GCAGAGTATA AGATTTGGA CTTGTTCATG TCCCCTCTCT 300  
CCCTATAAGG GGTGTATTTG TGACACCCCTA TCTNGTCANT AAACAGCATT TCTGATTAAA 360  
AANAANAAAA AAANAAN 377

SEQ ID NO:4746

LENGTH:89

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05634

SEQUENCE DESCRIPTION:

GATCCTGAAG TTTTGGTCA ATAGGCTCTG TCTTCGTGAG AGACGGGCTG AGAGTCAGAA 60  
ATAAAATCAAC CATTNTGGT TTATTCAAA 89

SEQ ID NO:4747

LENGTH:55

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05635

01464

2153480

SEQUENCE DESCRIPTION:

GATCTTCTT CTCCAGCTA AGAGTTCTTC AATAAATTAA AGAAATACCT GGAAA 55

SEQ ID NO:4748

LENGTH:244

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05636

SEQUENCE DESCRIPTION:

GATCAGCAGG GACCAAACCA TTGCCACATC CCAAGGNTGA ACAAGCATGG CTGAGCACCA 60  
GAGTNTGCAC CAAGTNTGAN TTTAGGCCTG CCAAGTGGAT TTACACCCAG CACGTCCAA 120  
ATTTGGGTGA GTGCATGCCA ACCCTGTAAA CATGTAGGGG TGGACAGGTC AACAGACAAG 180  
GTGACCCAG CNTCCCGCA AACTTGATTA ACACATACTG GNCACAGCAA TTANNNGAN 240  
NTGN 244

SEQ ID NO:4749

LENGTH:184

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05637

SEQUENCE DESCRIPTION:

GATCGCAGGG CCNTAGGTGC CTGGACCCAG GGTGTGCCAG CCCGTCTCTN TGCAGTCCT 60  
GGAAGGGCGC TGAGAAAGGC ACCAGCTCCT TGGACCCAC CTCCCCTGCT CTCACTCTCA 120  
TCCCCGTTCT CTTGTCCACA CAGCTCTTCC AATAAAGGTG TTTCTNTCC TCCTTCTCCT 180  
CAAA 184

SEQ ID NO:4750

LENGTH:282

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05639

SEQUENCE DESCRIPTION:

GATCCTAGTT GCCTTGTGT ATATTACTG CCTGCTTGAG TGTGGTTTT 60  
CCCTGTATCT TGTAGAAATG TTGGGGTGT TTCCCTGCCC ATATGGCTCG TGGCCTGCGA 120  
GCCAACTATT TCAGNTGTGT TTNACCTCA TTTTGATGA GGTGATTTAA ANNTNGTTTC 180  
ACTTTGTGTA GTGAATTCCA CAGTAGTTT CTGANTGTNG TAAAAATGA CTTAACATAT 240  
TACACAGATA TTCAATAAAA ANGTTTATT TCCTGTTGNA AA 282

SEQ ID NO:4751

LENGTH:65

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05640

SEQUENCE DESCRIPTION:

GATCCCATTG TGTATAAGTT AATATGTGAT AACTATTGAA TCTTGTACAA AAACAAAAAT 60

01465

TGAAA

65

SEQ ID NO:4752

LENGTH:159

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05642

## SEQUENCE DESCRIPTION:

GATCCATCCG CGGTGTTGCC TGAATCAACC GCTCATCCCT CGGATTGCTG AGCAGGATT 60  
 ACAGGGTCCA GGCACCAACAA TGATCTGTG TCCCCAGAAA GAATACTTGC AGTTTCCAGT 120  
 TGGACACTTT ATCAATAAAA TCACTATAAA CATCTGAAA 159

SEQ ID NO:4753

LENGTH:352

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05643

## SEQUENCE DESCRIPTION:

GATCTTGAGT TGCAGTCCAC AGCATTACA TTCTCAGGAT AAACATGCTT GTCTCCATAT 60  
 ATACTATCTG TGCCTGTAAT GAATGAAAAA TCCATCCACT CTGCTGCCAT TCACAGCCTA 120  
 ATCTTCTGGA GTAGTCAAA CAATGTTGG AAAAACATGG GACTGTATGT CATTACTATG 180  
 ACTGATAGCA GAATAATAAT GCATCTNACT TCTATATAGN GATAGNCTTA CATAGTTAC 240  
 CCTTGANATT CATTAGTNTG TCATANGTT TAGGAAAGGT AGGACCCGNN AAGNNNGTCT 300  
 ANTTAGTTGT CAAATNTTT TNCAGTGNNGC CAAGNNATT ACCATGANAN AN 352

SEQ ID NO:4754

LENGTH:297

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05644

## SEQUENCE DESCRIPTION:

GATCGGCTCA AAGCCTGTCA GCAGAGGGAA GGACAGAACT ACCAGCAGAA CTGTATCAAG 60  
 GAAGTGGAGC AGTTCACCCA GGTGCCAAG GCCTACCAGG ACCGCTATCA GGACCTGGGG 120  
 GCCTACAGTT CTGCCAGGAA GTGCCCTGGCC AAACAGAGGC AGAGGATGCT GCAAGAGAGA 180  
 AAAGCTGCAA AAGAGGCCGN CGCTGCCACC TNCTGAGGCA GCTGTGGGTG CCCCTGCTGT 240  
 GTGGCTCTGT ATNACTTGTG TGCTTGAAAT NTAAAAGGCC TNGCAAACCC TGGGAAA 297

SEQ ID NO:4755

LENGTH:126

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05645

## SEQUENCE DESCRIPTION:

GATCCCAGGC CTGTGGCTAG CAGCACTGGG GACAGGAATG GCTGGCCCT TGAGGGAGTC 60  
 GTGACAGGCT CAGCCTNGTN GTCTNGAGGG GACTCGGAAA TAAATTGTAG CAGCTTCCT 120

GCCAAA

126

SEQ ID NO:4756

LENGTH:317

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05646

## SEQUENCE DESCRIPTION:

GATCTAAAAAA GTCAAAAATC TGAAATTAA TAATATGAGA CTTACACTGA NTATAATGTT 60  
 CATTTAGAAC TTGCTGTGGT CCACTTCATT TATANGGAAC AAATATTTT ACAGTACACT 120  
 ATAGCAACAG CAAAAGCCCT CTCTCACCCCT GATAGGAATG GGTTTGCTGG GTGTCTAGAA 180  
 GTTAGATTCC TGCTGAATAG ANTTAGCCAT CCTTAAAAGA TNTTAATCCA ATACTGAACT 240  
 GGTTTATAAA ANGCTTCTC TATTGTANTG NACTGTAAGT AGTGAAATTC TGTATATACT 300  
 GCTATTNGCT GNCTGTN 317

SEQ ID NO:4757

LENGTH:228

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05647

## SEQUENCE DESCRIPTION:

GATCAGTAAT CCTATTAAAG AAGCGGAAGA AGATACCTCA GAAAGGTGGG AAGAAAAAAG 60  
 GTTTTCGGAG GCGGCCTGTGA TTATGGGTGT ACATATTGT ATATTTTTG TCATCCTGAG 120  
 ATACTTCTAA TTCATTGTA TATAGGTGGT TTCCCTGGA ATTCAATTAT TGTTTGCTTT 180  
 GGACATGTGG AAAGAGCCTT ACTAATAAAA TTGATTTAC TTATGAAA 228

SEQ ID NO:4758

LENGTH:312

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05648

## SEQUENCE DESCRIPTION:

GATCAGTTCT GAAACAGTTT CTTTCTGAAA CAGAGAAAAT GTCCCCCTGAA GACAGAGCAA 60  
 AATGCTTTGA AAAGAATGAG GCCATACAGG CAGCCCATGA TGCCGTGGCA CAGGAAGGCC 120  
 AATGTCGGGT AGATGACAAG GTGAATTCC ATTTTATTCT GTTTAACAAAC GTGGATGGCC 180  
 ACCTCTATGA ACTTGATGGA CGAATGCCCTT TTCCGGTGAA CCATGGCGCC AGTTCAGAGG 240  
 ACACCCCTGCT GAAGGACGCT GCCTAAGGTCT GCAGAGAATT CACCGAGCGT GAGCAAGGAG 300  
 AAGTCCGCTT TN 312

SEQ ID NO:4759

LENGTH:95

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05649

## SEQUENCE DESCRIPTION:

2153480

GATCAAGGTA AGAACATTG TAAAAAAA TTACAAAAGT GCTATTTGTT TCCTAAAAAC 60  
AGTGATTCT ATTAAAAAGG TGTAGANCT GGAAA 95

SEQ ID NO:4760

LENGTH:336

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05650

SEQUENCE DESCRIPTION:

GATCCTNTT CCANTNAAA GGAACGTAA GCTTTATCT TTTAACCAAC TGAACAATAC 60  
ACCAAAAGCA GCCTAGGGAT GACCATTTCT TTGAAAGCAA TTAGGTTATT CACCTGGTAT 120  
TAAACTATT TACTGTAAA AAATCTGTGA CTTCATGAAG TTGATTTNTA AAGGCAGCAT 180  
CANAAACTGA NANGGAAGGG AAANANTAGG CAGCTTCTCT GCACTTGTGTT GGAGCTCCCC 240  
AAANCAGGGT GCCATGGGGN AGTGGGCATC AAGNCGGGC TGCCCTTCG NGGTANCCT 300  
GTGGCAGTTC AGAGTCANGG TTTTCTNC GCTGGN 336

SEQ ID NO:4761

LENGTH:310

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05651

SEQUENCE DESCRIPTION:

GATCCAAATT CCCAGGTGG CGCCTGCATC GTGAATTCAAG AAAACAAGAT TGTCGGGATT 60  
GGGTACAATG GGATGCCAAA TGGGTGCAGT GATGACGTGT TGCCCTGGAG AAGGACAGCA 120  
GAGAATAAGC TGGACACCAA ATACCCGTAC GTGTGCCATG CGGAGCTGAA TGCCATCATG 180  
AACAAAAATT CGACCGATGT GAAAGGCTGT AGTATGTATG TTGCCTTGTGTT CCCTTGTAA 240  
GAATGCGCTA AGCTCATCAT CCAGGCAGGT ATAAAAGAAG TGATTTCAT GTCTNGATAA 300  
ATACCATNTN 310

SEQ ID NO:4762

LENGTH:364

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05652

SEQUENCE DESCRIPTION:

GATCCCCTCC AAGGAGCACCATATNACGC CGCCAAGGAC TCCATCCTGC GCAGGGCCAG 60  
GGGCATGTT ACTGCCAAG ACCTGCGCTA GGGGACTCCT CATAGCCCTC AGCCCTTCCC 120  
TCGTTTCCAG GCCTCTCCCC AGGCTTGCCA TCAGCCTTCT TTACTTTTG AGCCTCTGAT 180  
TTCCAATTCC CTGCTNNNN CCACCTCATT AAGAGGCTAG GTGAGGCCT TCTAGGTTGC 240  
TGGGGCTCTG CTGGTTAAGG AACAGGAAGC CTGACCATCT CCCTCCACTA CCTCTCCCT 300  
GTGCTGTTAC ACAGTCTCAT TGTTGATGTT AAATTAAGT CATATTCTG CTTCTTCCG 360  
NAAA 364

SEQ ID NO:4763

LENGTH:333

01468

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05653

SEQUENCE DESCRIPTION:

GATCGTCTGG AAGCAGCAGA GATGTACAGA AAAGCTGCTT GGGAAAGCGTA TTTGAGTAGA 60  
CTTGGTGTTC GAGTGCTTCA GATACATTT TCAGATACAA TNTGAAGACA TTGAAGATAT 120  
GTGGTCCTCC TGAAAGTCAC TGGCTGGAAA TAATCCAATN ATTCTGCTT GGATTCTTCC 180  
ACAGGGCCTG TGTAAGAACG 60  
GGTCTGGAG TTCTCATGGG NCTTTAGGA AATATTGAGT 240  
AATTTGGTAA NTCACCGNAT TGGTTACTAT ANATAAGGTC CCANTNCNTT AAGGCTTGAT 300  
AAGGTGAATN GNNGTGNGNN NTNTGGGGGG AGN 333

SEQ ID NO:4764

LENGTH:131

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05654

SEQUENCE DESCRIPTION:

GATCCTCAA AATTCAAACA AGGAAAAATC TCTCCCAATC TCTCCTTCC TCCATCCCTT 60  
TTCTTTACTT CTCATCCCCT ATATAATATT ATATAANGCA TACGTAATAA AAGACATTCA 120  
CTATTATTA 131

SEQ ID NO:4765

LENGTH:271

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05655

SEQUENCE DESCRIPTION:

GATCTCTTT GCTATGGCTC ACATTATTTT CATAAAAGTTG CTGGCCAGCT TTTACCTCTT 60  
GCATATAATC TGTTGAAGAG GAATCTGTT GCAGAAATTA TTGAGGGAGCA TCTGGCAAAC 120  
AGAAGTCAAG AGAACATAGA CCAACTTGCT GCATGAGTAA GGTGGCTTTG NTTGGTGTAC 180  
AGTATTTCAA AGGACTAGTA TTAANCTGT GATTNGGTT TTGTTTTAA GGGGTACANN 240  
NNGTAAGCCA TTNCTTAAN AACCGTTGAA 271

SEQ ID NO:4766

LENGTH:87

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05656

SEQUENCE DESCRIPTION:

GATCTTCTC TTGAGTCATT TTATTTTAT CATGGACTAG TGCGTGCTCC GTGTCCACCC 60  
CAATAAAAGG GTCTTCCTA CTTGAAA 87

SEQ ID NO:4767

LENGTH:293

TYPE:nucleic acid

01469

2153480

TOPOLOGY:linear

CLONE:HUMGS05657

SEQUENCE DESCRIPTION:

GATCTGGGCA ATTTGGCCT TGACTCTTC CTGGCTCCAG AGCTCAAGCT TAGANGCCAG 60  
CCCTGCTATT TCCAGCTCC TGAAGGCTCA GCACGGTGAG GCCTGACATC CTGGGGAAAGG 120  
GCAACAGGGA GACCTACAGG ATGNTGGCTG CTTGCAGACT GGTCAATGGG GGATGACGGT 180  
GGGGAGGTTG NCAGATGTGA GACTNNNGTA GCATTTNGTA CACATGGCCC TGTAGTTGTC 240  
CTTNGAAGA ACATCANTNA AAATATANGG GTNNNTAAAT TNTGGNAAA AAN 293

SEQ ID NO:4768

LENGTH:313

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05658

SEQUENCE DESCRIPTION:

GATCTTGCTA GGGAAAGGCCA CCTTGTATGC CGTGCTGGTC AGTGCCCTCG TGCTGATGGC 60  
CATGGTCAAG AGAAAGGATT CCAGAGGCTA GCTCCAAAAC CATCCCAGGT CATTCTCAT 120  
CCTCACCCAG GATTCTCTG TACCTGCTCC CAATCTGTGT TCCTAAAAGT GATTCTNACT 180  
CTGCTTCTCA TCTCCTACTT ACATGAATAC TTNTNTCNGT TTTNTGTTT CCCTGAAGAT 240  
TGAGCTCCA ACCCCCAAGT ACGAAATAGG CTAACCAAT AAAAAANTGT GTGGTTGGGG 300  
CCTGGGGNGC AAA 313

SEQ ID NO:4769

LENGTH:279

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05659

SEQUENCE DESCRIPTION:

GATCCCCCTCA TCACCCCTGT GCCCACTTCG GAGAACCCNT TCCGGGAGAA GAAGTTCTTC 60  
TGTGCTCTCC TCTGAGCTCC CCTGTCCCTT CTCACAACTN CTCCCTTTTC CCTCTCCTGG 120  
GCCCTTCCTT AGGTCAAGTAA TTGTTGTGAG CCCCTTAGGC TCCTTGATC CCATCCCTAA 180  
CCCTTGCTG ACCATGTGAG GTTATCTGAA GCACAAGNNC CACCCTNANG NNGNNNTTCG 240  
ACCCGATTC CTACCACCTT TTTGGGCCG ANCCNAAGN 279

SEQ ID NO:4770

LENGTH:203

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05660

SEQUENCE DESCRIPTION:

GATCCATGTA ATCTGACGTC ATCTTGCTCTC GAAGTCTCTT TTTTGCCCC AGGCCTTGAA 60  
GAATACACTG TGACTTAAGA AGCCTTACCA CGCAGTAACt AAAGCTTAG GATGACTGTN 120  
TTCGAGGAGT GCCGTGTGTT GCATGCAGCT ACCCGTAGGA AGACTTCGCG CATATCACTA 180  
ATAAACCTGA ACTCGTGATG AAA 203

01470

2153480

SEQ ID NO:4771

LENGTH:112

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05661

SEQUENCE DESCRIPTION:

GATCGTTGTG CTTNTTNC TGTGTTGGTT GCCAGTTAT AGTGCCAACA CGTGGCGC 60  
CTTTAATGGC CCGNGTGCAC ACCNAGCACT CTCGGGTGCT CCNATCTCT TN 112

SEQ ID NO:4772

LENGTH:291

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05662

SEQUENCE DESCRIPTION:

GATCTGGGAG GTGGAAGCCA GGCCAGAGGA CTTGGGGAAA ATNAGATGGA GGAAGGAAAA 60  
AGGGAGAACG TGAGCCACAG CTTAACTCCT ACAGAGTGAA ATNAAAACGG GCTGAAAATA 120  
CCACCCCCAGG AGAGGACCTC GNCCCANCA AGCCAGTGAG CAGCCCTGCC AGACTACTGN 180  
CAGNCTGNGA AACCCAGANG CTGGGTAGTC ATGTGGGGCT TGCCCTTCTT TGCCAAAACG 240  
NCTGGGGGAA NCCAAAATN GGGCCCCACC CTTNNNTGTTT CTTTCCTTNG N 291

SEQ ID NO:4773

LENGTH:133

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05665

SEQUENCE DESCRIPTION:

GATCCCAGGC CTNTGGCTAG CAGCACTGAG GACAAGGAAA TGGNTGGTCC CCTTGAGTAG 60  
GTCGTTACAA GGCTCAATGC CTGGTNGTCT TGGAGGGTAC TCGGAAATAA ATTGTAGCAG 120  
CTTTCTGCC AAA 133

SEQ ID NO:4774

LENGTH:316

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05667

SEQUENCE DESCRIPTION:

GATCACCCAG CAGGAGTCGT GGCAGAACGG AGCATCAGCC AGACCCCTGTT GTGGGGCGTTG 60  
TCATCAAGGG AGCTTGAATG GAGGGTCTGG TGTCAGATAC AGCCGACTCC AGCCCCAGCT 120  
CATCCCCCAT GATGCTGTGT GACCCACTGG GCACCTCTGGT GAGGGAGCTT TCCAGACATC 180  
AACAGCCCCAC TCTGCTTCCC TTTCTGAGTC CCCTGTCCAG CACTGCCTAG TGTTGGAGGG 240  
TAGACCAAGG CTGTGCATGA TTCACCCCN T CTTCCATCC TGGAGCTGGC AGTGAATAAA 300  
AGCCCGTATT TACAAA 316

SEQ ID NO:4775

01471

2153480

LENGTH:113

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05668

SEQUENCE DESCRIPTION:

GATCTCCAGA GACCCAAGTT TAGTTCTCA TAGTGTATTG GAAGTAGTTA TACTCCTGGC 60  
TTAAGTAGTT TAGTGCCTGG GAGAATCCAT TACTGAAAAG CATTAACTT AAA 113

SEQ ID NO:4776

LENGTH:157

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05669

SEQUENCE DESCRIPTION:

GATCTAACAA AAATGAAACA TGAAATGCAG TAGCAACCAC TAAAAAAAATTCAAGGN 60  
CATCTAACTN TTTCTCTCAC TTNGCCCTT TGTTTATCCT TCCCTGTGAT TAGATAANCA 120  
NAATAAAAAN CAAAATGCTG TATTTCTCTN CTTACGN 157

SEQ ID NO:4777

LENGTH:214

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05671

SEQUENCE DESCRIPTION:

GATCACTTAG AGAACACAGGC CGTTAGGAAT CCATTCTCAC TGTGTTCGCT CTAAACAAAA 60  
CAGTGGTAGG TTANTGTGTT CAGAAAGTCGC TGTCCTTAATC ACTNTTGCGG AAGTATGGAA 120  
GTCACANCTA CACAGNGANT TCTCAGCTA CAAATTGTGN CTATACATNT CTAAGCCTTG 180  
TTTGCAGNAT AAACAGGGCA TTNGCAAAC TAAA 214

SEQ ID NO:4778

LENGTH:141

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05673

SEQUENCE DESCRIPTION:

GATCAGTTN CAGCAGCAAG TACAAAAGGA GAAGAGGAAC ATCCGTTGAA TNAGTGTGTT 60  
TTGTACATAA CTTCAGATAAC TTGTAACAT GCCTTATATT TGTCCAACAA CTGTCAAGANT 120  
AAAGAACATT CTAAAATNAA A 141

SEQ ID NO:4779

LENGTH:154

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05674

SEQUENCE DESCRIPTION:

01472

2153480

GATCTTGTGA AAACACNGTN TTNTCGACTA AAAATTCCAC TNTCTTCATC TNGTTGTGAA 60  
GCTAAAAAGA GGGACTGTTA AATAACAATGT ATGATACCAT GGCAAAAATC TTTCTGAAT 120  
TGTCTTNNGT AAAAGTATTA TTGAATTTN CAAN 154

SEQ ID NO:4780

LENGTH:236

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05676

SEQUENCE DESCRIPTION:

GATCAAAATA GCTATTGCTA CAACATTTTC GAAAACAAAG TTGGGGCTGT ATTTCTTAA 60  
AAAGATAAGC CTCTAAAAAT GCTTGGCAAA AAAAATATAG TGTTAAAATA GGCCAGTGAT 120  
ATTAATGAGA AAATGAAAGT ATGTATCAGG ANTAANGTGA TATTGCATAG GNGTATTGTA 180  
TTTNATGAA TTNATGCCA GTTGTAACTA TGACTATAT ATGTNAANTT ANNNNN 236

SEQ ID NO:4781

LENGTH:168

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05679

SEQUENCE DESCRIPTION:

GATCTCAGTT GCACGTGCAA ACAAATCCAA ATTCAACAT TCTTAGGAGG TTTTTNTAA 60  
GGCATGACAG ATGATNTAAA CAAATAAAATA GCATGCAACA AAANGTCTT ATTGNAAGAA 120  
GTGGAAGTTA TCTTAATGCC ACGGNTCACC ANCAATTNAA AAGTANAN 168

SEQ ID NO:4782

LENGTH:79

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05680

SEQUENCE DESCRIPTION:

GATCAGTGAA CACTAACATT TTGGGGACAA CTTAGTCAT TGGTTTCCT TACAACAAAA 60  
TAAAGTAAAA TGTAGCAAA 79

SEQ ID NO:4783

LENGTH:107

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05681

SEQUENCE DESCRIPTION:

GATCACCAATT CAATTGAGT TTCCAGGGGG AAGTGCATGT ATAATGNAAT GATAATGGAC 60  
TTCAATGANG GATGTCATCA ATNATGNACA TATAGATNGC CTTATAN 107

SEQ ID NO:4784

LENGTH:319

01473

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05682

SEQUENCE DESCRIPTION:

GATCTAATAA GACACGTAAT AGATTAGAAG TAGGAAATT AATGAAAAAG CAGAATTAAG 60  
 GATGACTTCT CACTGGCTTG AAATNCTAAA TGGATGACGG TGCTGTTAG TGAGTTGGGG 120  
 AAGACTGGGC GTGGTGATGG GTGTAGAAAT TGAGAAAGGA AAATCAAGAN TTTCCAGAAC 180  
 TTTCAGAGCA ATGTTAAATA CTTTCTTGA TAGTGGGTCA GTCATCATT ATAAGTGCAT 240  
 TTCTAAAAAT NTTGCTTAAT TTTNTTTTG AGCTTTGTAT AAGTCCAATT TTGTGTGTAC 300  
 TGATTATNTT GCTCAATAN

319

SEQ ID NO:4785

LENGTH:78

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05683

SEQUENCE DESCRIPTION:

GATCTTCAT CTGTGATTCT TATAAGAGCT TTGTCTTCAG AAAAACTAAA AATAAAAGGC 60  
 ATTGACTAA ACAGCAA 78

SEQ ID NO:4786

LENGTH:51

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05684

SEQUENCE DESCRIPTION:

GATCAGTTGT AAGTCATTT CTTTACAAAT AAAAGCCTCT TCCATTTGAA A 51

SEQ ID NO:4787

LENGTH:288

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05685

SEQUENCE DESCRIPTION:

GATCTTTCC ATCTGAGGGT ACAGGAAGTA CCAGGACCTG TTTCAGTTT TNAATCCTGC 60  
 AAGCACATTC CAAGACTGGC CTGAAACTGC ATGAGCAACA TCACTCGAAA TAATTTTTT 120  
 TTTCAAANGC ACCTTAACAA CCANTGCGA TGCTGTCCCTG TTCCTTTTA CTCACACCC 180  
 TCTNTCCCTT CTCGTCCNA TGCTCCACCA NCTCAGTGCT NTGTGCTGTA TGCCTGTGCT 240  
 CTCTGTTNTN GTATACTCAA TATANGTGNATAAAACTGGT GTTTGTN 288

SEQ ID NO:4788

LENGTH:278

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05686

## SEQUENCE DESCRIPTION:

GATCATGCAT GCAGTCATGT CTCCAGTATT CTGTGAAAAG CCAGGATAACG TTAGGATGTG 60  
 AGTTTAGAAA CTGAGTCAT TCAGTGCATG GAAATNCACC GCGGAGTTAC ACAANGCTCC 120  
 TCACTGTAGT CCAGGCATT GGTNGGCCGC CANCACCCCTG CGGGCTTCAC AGGGACGCGT 180  
 GCTTGTNCTC CAAGNCCGN AACCCCTACT GTGCACACAN CATCNNACAC ACCTTTGTTT 240  
 TTGAAATTAA AATGTTNATT AGTTNAAAA AGGGNGGN 278

SEQ ID NO:4789

LENGTH:337

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05687

## SEQUENCE DESCRIPTION:

GATCCCCTGT TGTGGCCAG CTTGTNCAGG CCCTGGNATG CTGCATCTCC AGGCAACTAT 60  
 GCACTTCCC GGGGAGAGAA CCACTATGAG AAGTGGGGGC AGGGCACACA TTCATCTTG 120  
 TAGGAAGGTC TGGCCTGGGG TCAGGTGAAG GAGGGCCAG GTCAGTNCTG GGGTCCCAGT 180  
 GACCTGCTT GCCATTNTCC TGGTGCCTGNT GCTGCTCCCT GTTCTGGAG CTGGATGTTN 240  
 CCNAGCTGGC AGTTGAGCTG CCTGAGCCAA TNTAGTCTAG NCTTTGGTAA CTTGNGTGAA 300  
 CCATAATAAN GGGGAACCAT TNTNGGCCTT GTGNAAA 337

SEQ ID NO:4790

LENGTH:251

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05688

## SEQUENCE DESCRIPTION:

GATCACAAAGG CTGCCTGCCT CAGTCTTGGA GTCCTGTTGG GTGAATNAGG CAGATGGAA 60  
 ANAGCCTCAC CAGCAGCTGC TTTGGAGCA GGGGTCCAAG GAAGAGAGGG TGGCCTCGAC 120  
 ATCAAACACTGC CTGGATTTT CTACCAACCT GTTACATCAT AACAACCTCT GAAACACACA 180  
 CCAGCCCTGA GTTCTGGGCT CATTGAAGC CTGGAATAGC AATAAATCTT TTTAACCTGC 240  
 GGACAGTTAA A 251

SEQ ID NO:4791

LENGTH:316

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05689

## SEQUENCE DESCRIPTION:

GATCGAAGAT GTACAATGTT AAATGTNCAT ACCAGTTAAA CTGCACTTTC CCAAGGGGNC 60  
 AGCTGGNATC TACTTGAAT GGGNATCAAG AGACCAACAA ATGTTTACAG TTTCTGTGGC 120  
 CCGTTTAAGT GTAAAATGCA GAAGTGGCTC TGTCCTCCCA GAGTTAAGGN TTTGCTACAC 180  
 TGGTCCTCTG GAAGCATTAA NGTACAAGAA AAGGCTTATA GTCAGNNTCA CTTTTAGTAA 240  
 TCGTCTNCTG GTCCCTGGNC TNTCTGGTT CTGTNANTGC TTGTAACCAA TGANTGATGG 300  
 TGTTGCCAAT CTNAGN 316

2153480

SEQ ID NO:4792

LENGTH:346

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05690

SEQUENCE DESCRIPTION:

GATCAGTCCT GTCATCCAGC TGCA GCCCAC CTTCACACCC ATGC GGGT CG CACT NGCT GG 60  
CACATTCCAC TACTACAGCT GCGAGAGAGC CAAAAGGCC ATGGGCTACC AGCCACTAGT 120  
GACCATGGAT GATGCTATGG AGAGGACCGT GCAGAGCTTT NGCCACCTGC GGAGGGTCAA 180  
GTGAGGGNCA CTNGNGCTG GGCTCTCTNG ACACGTTGCT CAGCCAGTCA CTNCTTCCCC 240  
TGNTGGATTG ATGAGNTAAC ATCCTTNGA ATGGAGTTN GCTCTTGCC TGTGACTCCT 300  
TCTGCTAGGC AGNGGAGCGC ACCNTACTNT TTNCGTNGCG GTGNGN 346

SEQ ID NO:4793

LENGTH:187

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05692

SEQUENCE DESCRIPTION:

GATCCCAGGG ACTCATCCTG TGACTTTGTA ACCACACTCA TTCCCTTCAA ACACAGAGGA 60  
GGAATTATTG CTTCATCTGA CTTTATTCAA ATCTAGTTAT GTATTGGCT AAATTATTTG 120  
TGCAAAATT GAANNNNNNT TTNATTAAA TATTAGAAAT AGCACAAAGT CATGGNGTTT 180  
TTAANAN 187

SEQ ID NO:4794

LENGTH:228

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05693

SEQUENCE DESCRIPTION:

GATCTCAAGA GCCCTGTCAG TAGAGTAGAA GTCTCTTCA GTTTGCTTTG CCCTTCTTC 60  
TACCCCTGCTG GGGAAAGTAC AACCTGAATA CCCTTTCTN ACCAAAGAGA AGCAAAATCT 120  
ACCAGGTCAG AATAGTGCCA CTAACGGTG AGTTTGACT GCTTGAACG GGAATCCTT 180  
CAGCAAGACT TCTCTTGCC TCAAATAAAA AGTGTTTG TGAGCAAA 228

SEQ ID NO:4795

LENGTH:230

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05694

SEQUENCE DESCRIPTION:

GATCTGCTTA AAGTTAAC TTTTATACCT ATCTGAGTGA ATTACAGACA ACCTATCATT 60  
NATNCTGCTN CGAGGGTCCC CAGGGCCCTT GTACAACCGA CAGNTCTTAC TTTAAATGC 120  
AATCTCTTGT CTACATACAT NATTTCTTA ATNGTTAGC TATTTATAGA AAGCTGCAAT 180  
AGAACTGTNT CAACTGTATA ACTATTTACN ATTCAANAATA NAANTATTN 230

01476

SEQ ID NO:4796

LENGTH:367

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05695

## SEQUENCE DESCRIPTION:

GATCTCATT GCTGAATGAT TGATTTAAGA GTAAAATTNG CCACTGCCTG CTTTTGTAT 60  
 AGTAACCGGT TTTGTTGCAC TNGTCTGTGG CTGAAACACT TACCTGCAGT GGAANGCCGA 120  
 GCAAGGAGGA GGTAAACATT GGAGATGTTT GTGAAAATAT TACTCTTGCT GTGAGGTTT 180  
 AGTTTGTAA 60  
 GAATGAGAAA GGGGCTAAGT AACTTAATCC ATCTCAATGT AGTGTAA 240  
 TAAAAANGGN GCCTAATATT TGAAATGGGG TCTCAGGNCA TGNTCTACAA ATNTGGGNA 300  
 NCTATTTTN ATGCCCGTG TAATTTNCA CCATTTGNN NATGAGTTNA TTGTAGGGT 360  
 CANNATN 367

SEQ ID NO:4797

LENGTH:88

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05696

## SEQUENCE DESCRIPTION:

GATCTTTCT CAGAGCGTCT CCATGCTATG GTTGCATTTC CGTTTCTAT GAATNAATT 60  
 GCATTCAATA AACAAACCAGA CTCAGAAA 88

SEQ ID NO:4798

LENGTH:239

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05697

## SEQUENCE DESCRIPTION:

GATCACAAAGT GCAGCATCCT TTAATTCCCT CTGCTATATG TCACACAGTT GTTATTGGA 60  
 GAACCAAGTA TGTATTGCAT GAAAACATTA TGACTTTTTT CTCTTAGTTT AAATAAACTC 120  
 CAAGGTAACT GGACTTCTAA AGCACCTTTC TGTTTGCCTG ATATCTACTT TAGCAATAAT 180  
 TTTTTTACA ACCCTCTGAC TCAACAAAGT AAATAAAAGT ATATTTATC ACTATTAAT 239

SEQ ID NO:4799

LENGTH:148

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05701

## SEQUENCE DESCRIPTION:

GATCTGGCCT TATGCCAGG CCTGGCCCT CAGAAAGCCC GGAGGCTGTT TGATGTCCTG 60  
 CACGAGCCCT TCTTGAAAGT ACCCTGATGA CCCCAGCTGN CAAGGAAACC CCCAGTGTAA 120  
 TANTAAATCG TCCTCCCAGG CCAGGAAA 148

2153480

SEQ ID NO:4800

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05704

SEQUENCE DESCRIPTION:

GATCCTCAAC AGACACCTTC CTTGACTGAA AGTTTAATC GTGATGCAGA GNCAGTCAGT 60  
NATNTNCCGC CATCCACAGG AAATTCAAGCA TCTTTATCTC TNCCACTTN 109

SEQ ID NO:4801

LENGTH:147

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05707

SEQUENCE DESCRIPTION:

GATCAATTCA ATTAGATTAA AATNAAGAAC CTTGGGGCAG AGTTGGGTT TTGTAAAATN 60  
AAAAGAGTTC TGGAGTTAAC CATCGTGAAC ATGCTTAACA CTACTGAAC GTACACTCAT 120  
TTTATAATAA AACTATTAAA TTGTAAA 147

SEQ ID NO:4802

LENGTH:295

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05708

SEQUENCE DESCRIPTION:

GATCTAATTAA AAAATTCAATT GGATTGAAAT NTATTGAATA TAATTCAACT TTTGTAACCA 60  
GGTAGACTTT NCTNATAGTT TAGTTTAAT ATAGTTAGG GTATTACTGG CTTTCCCCA 120  
GGTGACACAC TAAGGNCTGT TTACATGGCA ATTCCAGCAG CAACAGGNNG CTGGAATTNA 180  
GACAAGGAAA GCTCATTGT TTCTTTATG AAGGTTAAAG AAGTCTACAG CTTGGGCTGG 240  
CCGGTATTAA TTNATTCTGT GGCCAGAGGA TTTAAATTT NNCNCNAATN TTNTN 295

SEQ ID NO:4803

LENGTH:52

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05709

SEQUENCE DESCRIPTION:

GATCATGCCA CTGTCTCCA GCGTGGCAAC AGAGTGAGAT TCTGTCTCCA AA 52

SEQ ID NO:4804

LENGTH:374

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05710

SEQUENCE DESCRIPTION:

01478

2153480

GATCAGATGG GGACACACAA CCCCTGGATA TGTTTCATTG TCAGATTTG TGCTGNNA 60  
TTAAGAACATGG AATGGTGGGT ATCTTCCCTT TTTTTAATG TATCTTAACG GTTGCCGTGC 120  
AGTGNNNACA AACTAGTGCG TTGACGGCAC CGTGTCCAAG TTTTTAGAAC CCTTGTAGC 180  
CAGACCGAGG TGTCTGGTC ACCGTTACAC CATCATGCTT TGATGTTCCC CTGTCTTCC 240  
CTCTCTGCT CTCAGAGCA AAGGTTAATT TAAGGACAAA GATGAAGTCA CTGTAACATA 300  
ATCTGTCAATN GTTTTACCT NCCTTTCTT NTTTNAGNGC AGAGGTTAAA AGTAAGTATN 360  
AAGCACCCGT GAAA 374

SEQ ID NO:4805

LENGTH:123

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05711

SEQUENCE DESCRIPTION:

GATCTGACTG TGGAAACATC CTCTCACTTG CATTCTTTA ACTTAAACT ATTTAAGAAC 60  
TGATGTTCCG ATTATTGTAT ATATTNNCT AAAANCCAAA TAAAGCTACC TATGAAAATG 120  
AAA 123

SEQ ID NO:4806

LENGTH:299

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05714

SEQUENCE DESCRIPTION:

GATCAAACAG GAAATTGAAA GCCACTGNAA CTATGCAGCA TTTCAGTTT CATTAAACA 60  
CTTAGTTCAAG AAACCTTAAA GGATTTGANT ATTCAAATT GCACACGTCA CTCCAGCATC 120  
TCTGTAANAT AATTGGAATG AANATACTTC TTGCACTTAA AACTGCACA TGCGTNCTT 180  
TGCCTGTTNGT CTGCATCTG AACTTAATA CCAANTNNNT TTTGCATGCT TTTGTTCCCT 240  
ACGNGATAAT GGCATGGTTT CATATGTNAC TACTTGGAC CAGTGTTC ANNATGGNN 299

SEQ ID NO:4807

LENGTH:204

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05715

SEQUENCE DESCRIPTION:

GATCTGGACA AATGACAGTA ACTGTTCTA ACCTTGATTT TCTCATCTNT AAGATGCCAA 60  
TTGTAACCTCC TAAGGNTACT GAGGATTTT TAAAATGCGT GTACAGTTCC TGACCAAGTGG 120  
TTTGTGCCTA ATAACATNATT ACAAAATNATT ACCNAGTAAA ANCCTGCGC CANGTGTGAN 180  
AACGTAAAGC TANTTAATCC ATNN 204

SEQ ID NO:4808

LENGTH:348

TYPE:nucleic acid

TOPOLOGY:linear

01479

2153480

CLONE:HUMGS05716

SEQUENCE DESCRIPTION:

GATCAAGCGA CCTTGAGAGC AGAGNACAAA TCCCAGTGT GCTGATATAT GGCTTCTNCT 60  
TCTCTTGTT GTGCCTCAGC TCTGAAGNAG TTCCTGAGAA TGGGTTACAG ATGTCATGTT 120  
AGCTGGGAGT CTTCCCACAT GTGCCACTTC AAAAGGCAGC ACCACTGGGC GCCTGCACTT 180  
ATTTGAAAAT GGNACTTTGG GNNAAGTATC CCTGCTAGTG GCTCTGTAAC TTAACAGATG 240  
TCANTTAGGC TTTTGTCTT GTGCCATCA TATNNANGCT AATGTNTACA TCCTTTAAA 300  
CANNTTGNGT ATGACAATTN CCTCAGGATT TNGGTAAGN CTTCCAN 348

SEQ ID NO:4809

LENGTH:287

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05718

SEQUENCE DESCRIPTION:

GATCCTCCTG CAGACCACGC CGGTCCCTGCC TGTGGCGCCG TCTCCAGGGG CTGCTCCTC 60  
CTGGAAATTG ACGAGGGGTG TCTTGGCAG AGCTGGCTCT GAGGCCTCC ATCCAAGGCC 120  
AGGTTCTCCG TTAGCTCTA TGGCCCCACC CTGGGCCCTG GGCTGGAATC AGGAATATT 180  
TCCAAAGAGT GATACTCTT TGCTTTGGC AAAACTCTAC TTAATCCAAT GGGTTTTCC 240  
CTGTACAGTA GATTTCCAA ATGTAATAAA CTTTANTATA NAGTAAA 287

SEQ ID NO:4810

LENGTH:342

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05719

SEQUENCE DESCRIPTION:

GATCACCAACC CCGAGCCCTC TNATCCTCTA TGGNTTCACT CCCATCATGA TTTGGAATTA 60  
TTTATTTGTG AACTTGATTA GCCGAGATTG TAAATNACAT GAGGTCAAGG ACTGGACTGG 120  
GTATGTTTC TTCTCTGTTG CTTTCTGGC ATGAAGTACA GTAAATACAG CACCTGATAC 180  
ATTATACATG GCCACAAATA TTTGTTGAAT GAATGANTAA AAGCACATTG GGTTCTGACC 240  
ATTCACTGTC CCTGNAANGA ATGCAGTTT TCAAACCTGT GCNTCACCAT CCATTAGCGG 300  
GNGTGTGAAT CCAATTAGG TNGGTGATGT CTAGCATTNN AN 342

SEQ ID NO:4811

LENGTH:299

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05720

SEQUENCE DESCRIPTION:

GATCATTAAC CAGAGTACCT CTACTCTTAG CAAACTCTAG TTTATGACAA GTATTTAAAA 60  
TATTTAAAC AAGCTTATGC AGTTCTTAAG GNCGNAGGTA AATGAGATGT ANCTTAAAAA 120  
TAGTATTGGG AAAATGTGA TAGTTAACAT TAGTGGATT AGACTAGCCA AATGACATAG 180  
TAGGCTCTGA AACATCTTGT CAAGTNTATG TNTTTGTGC ATGANTTTT GCTGGAAAGC 240  
TGTCTTCTC TGAAAAACAC ANCCTCTTA GACTGNNANG CCANTTATAA CNTAANNCN 299

01480

2153480

SEQ ID NO:4812

LENGTH:310

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05721

SEQUENCE DESCRIPTION:

GATCTTNATG CCCAACATTG GTTATGGAAG CAACAAAAAA ACAAAGCACA TGCTGCCAG 60  
TGGCTTCGG AAGTNCTGG TCCACAACGT CAAGGAGCTG GAAGTGCTGC TGATGTGCAA 120  
CAAAATCTTAC TGTGCCGAGA TTGCTCACAA TTTNNNGNTC CAAGANCCGC AAAGCCATCG 180  
TGGAAAAGAGC TGCCCAACTG GCCATCAGAG TCACCAACCC CAATGCCAGG CTGCCAGTG 240  
AAGAAAATGA GTAGGCAGCT CATGTGCACG TTTCTGTTT AANTAANTGT AAAANCTGCC 300  
ANANAAANTN 310

SEQ ID NO:4813

LENGTH:63

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05722

SEQUENCE DESCRIPTION:

GATCCCTTTT CTTTGATGG ACCAGAAATN ATGGGTTGTA CAGGGTGCCA GATAGATTGG 60  
AAA 63

SEQ ID NO:4814

LENGTH:127

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05723

SEQUENCE DESCRIPTION:

GATCCCAGTG CTCTACTGGG GGATGAGAGA AAGGCATTTT ATAGCCTGGG CATAAGTGAA 60  
ATCAGCAGAG CTCTGGGTGG ATGTGTAGAA GGCACTTCAA AATGCATAAN CCTGTTACAA 120  
TGTAAA 127

SEQ ID NO:4815

LENGTH:350

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05724

SEQUENCE DESCRIPTION:

GATCGAATAC AGATGACCCCT GCTGTCGTGT CTTCATTTGT AAAATNCTCC TACAAATGGA 60  
GACATTGAAG GATTATGTGT ATGGAAATNT TTACAAAATT CCTTTCTGTA CCTATTCTGT 120  
AGATGCCTGT ATAATCGGNC TGGATGTACA GCTATAAAATG TGTTGTGAGA GCAAGAGAGA 180  
GAGAATGGGT AGAGCCTGCT GTACCTTTT CCTTTAAAT TCTTCGAGTT GGTAAATGAG 240  
TAAGATATTG GAAACCTTAA TGNAAGCTG CTGTTCATGN TTTGTGTGTA TAGTGAGCTG 300  
CCTGTAGTAT TTNNTTATTG TCTGNTAAAA AAAGNAAANC CTGAAAACN 350

01481

2153480

SEQ ID NO:4816

LENGTH:178

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05725

SEQUENCE DESCRIPTION:

GATCTTGAAC AAAGNCACTT AGTTNCCCTG GCCCTTGGTG TCTTCGTCT ATAAAATATT 60  
GTACCAAGATT ATCTCTGAAA TCACTNCAAG GTTTAATATA TATANTTATC AATATTTAA 120  
AATTCAAGCA ATATTCACTT TAGANATTAT TATAACATTC TATANTNGTN GGGGGGN 178

SEQ ID NO:4817

LENGTH:123

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05726

SEQUENCE DESCRIPTION:

GATCGAATCG GGACATNATG GGAGCTGACA AATTATATT CTNTTCAAT NTTTAATC 60  
CCACTTCACT GTGAGGGGAA GGCTTTCA CGGAACTCT CCAAATATTA TTCAAGTGCC 120  
AAA 123

SEQ ID NO:4818

LENGTH:61

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05727

SEQUENCE DESCRIPTION:

GATCCCAAAT TTGTCCATAG CTGAAGTCCA CCATAAAGTG GATTTACTTT TTTCTTAA 60  
A 61

SEQ ID NO:4819

LENGTH:292

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05729

SEQUENCE DESCRIPTION:

GATCTATAGA ATTAGATTT NTTATATCTA AAGAAATATA TATAAATACA TAAACGTAGG 60  
TATGTATAGC ATGANCAGAA TACAGTGCTA TTGACCATT GTCACAAGAC TTATTTATAA 120  
AACCTCCTCA AGCTCTGCC AATATCTTAG TTAAGNTTGC ATCTAAGGTG GGCGGNGGAT 180  
GNNGATTGAG GCACTGTCAG GTCATGNTTG ATTACCTGGG TGACAAATT ATGTTACAC 240  
CAAACCCCCA TGNCACACAG TTTACCCATG TGACANNACN TNCACATGTC CN 292

SEQ ID NO:4820

LENGTH:61

TYPE:nucleic acid

01482

2153480

TOPOLOGY: linear

CLONE:HUMGS05730

SEQUENCE DESCRIPTION:

GATCCCCCAT ATACTCTGCT ACAGCTCCTA TCATGAAAAA TAAAATGTTT GTCTTGCAA 60  
A 61

SEQ ID NO:4821

LENGTH:140

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS05731

SEQUENCE DESCRIPTION:

GATCCGNTGG GGTGAAAGCA GCCAGCTCAT CCCAGTAACT CACAGGACAC AGCCATCCAG 60  
CGGCATCTT CCTTGTGAA TGATACTGTA ATNACCTTC AAAGTNAAGA GTAGCACATT 120  
AAAGTNATT TATTGTTAAA 140

SEQ ID NO:4822

LENGTH:309

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS05732

SEQUENCE DESCRIPTION:

GATCTCAATG CTGTCTGGGG ACCCTAACAGAG TTNCTNACC TGTNCAGTCT CATCTAACCT 60  
TCCAATGTCT GATGTTCTG CCAAATTCT GCCTGATTCT GGGTCCGTC TGACCTCCAA 120  
AGGTCAGCTT GGTGCTTGAG GTCTCCCTGC TCTTGGTGGC AGTGGTAGCA GCAACAGCAG 180  
CAGCAGCAGC AGCAGCAGCA GCAGCGNCCT CTCCACTTTN CCTTNGCCCN TCTNCTGGGT 240  
AGAGAGGCAC TTTCAGGGAC TTTCCTCCAG GNTGGNTCNT CAATATGGGA ATGNGCTNTG 300  
NAAGGNTTN 309

SEQ ID NO:4823

LENGTH:109

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS05733

SEQUENCE DESCRIPTION:

GATCCTCCTG CGGGCAGTAG CCTTGACAAG GGCCACCTCT TCACAGGATG CAGTCTGTCT 60  
GTGCCACCAAA CTCTCACCA AATAGAACAC TTGTGTCTCT CTGTGGAAA 109

SEQ ID NO:4824

LENGTH:233

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS05734

SEQUENCE DESCRIPTION:

GATCCATTG GNAGGAAATG AGAGGGCTGT NATCAGCTCT NATTAAGAAA GGAGATTCT 60

01483

2153480

TCATGCTTC GATTCTGCAT GGGGTACAGC CAGTCACCTC ACCAGAGANT GACGGCTGGA 120  
GAAGTNAACT CTGTAATACC ATAATAAAGA GTGCTTGAA TAAAAGNCTG TGCACANGGA 180  
TTAATATTTC CCNTCTTAAG TATCAAACGA CCTCTGGANC AAATTNTACC NTN 233

SEQ ID NO:4825

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05735

SEQUENCE DESCRIPTION:

GATCTGACGT TTTCTACGTA GCTTTGTAT TTNTTTTTT TTTAAANTG AAGGACCACT 60  
GATGAAGCCC TNCCANACCC CTCCCGGGTC TAANAAAACG TN 102

SEQ ID NO:4826

LENGTH:277

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05736

SEQUENCE DESCRIPTION:

GATCAAGAAA TNTCTCTNCT CCTACATCCA GCTCCTCTAG GGGCAGCCTC CGTCATCCAT 60  
GCCCTCCAG GACCCTCCAC TCACTGCTGT GAGTGCCTGCCT CACCAGAACC AGTTAAGAGA 120  
CAACTATCAA TTNNNGGGAC CCAAATTATA AGGGCCCTGN CCTGTACTGA AGNAAAGGGG 180  
NGCACAAAGGC CTTAATGGAC ATTGNCTGT GAAAACGCAN ACATGAATAT GGTTGGAGAG 240  
CNTGGCTTAG GAGGGTGTCA TGGGNAGNA GNNGCTN 277

SEQ ID NO:4827

LENGTH:98

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05738

SEQUENCE DESCRIPTION:

GATCCCCTCT CCTGCCCAAG CACTTCACAG CTGGACCTG CTTCACCCCTC ACCCCCCCTCC 60  
TGGCAATCAA TACAGCTTCA TTATCTGAGT TGCAATAAA 98

SEQ ID NO:4828

LENGTH:81

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05741

SEQUENCE DESCRIPTION:

GATCTGGGAT TTNTTTTA TTTGAAATG GGAGCTTTT TGTGACAAG TTCATTAAGA 60  
ACTAAAAACT GTTTCTGTAA A 81

SEQ ID NO:4829

LENGTH:234

01484

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05742

SEQUENCE DESCRIPTION:

GATCGATTTC TTTCTCCAG GTAGAGTTT CTTTGCTTAT GTTGAATTCC ATTGCCTCTT 60  
 TTCTCATCAC AGAAGTGTG TTGGAAATCGT TTCTTTGTT TGTCTGATT ATGGTTTTT 120  
 TTAAGTATAA ACAAAAGTT TTAATTAGCA TTCTGAAAGA NGGAAAGTAA AATGTACANG 180  
 TTTANTAAA NGGGGCCTTC CCCTTAGAC TAANTTCAAG CATGTGCTTT CAAA 234

SEQ ID NO:4830

LENGTH:130

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05743

SEQUENCE DESCRIPTION:

GATCCACCCA CCTCAGGCC CCAAAGTNCT GGGATTACAG NCATGAGCCA CCATGCTCAG 60  
 NC GTGTGTGT NTGTGTGTAT TATTATATG TATATGCATA CTATATACAT NTATATATAC 120  
 ACTATATAAA 130

SEQ ID NO:4831

LENGTH:103

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05747

SEQUENCE DESCRIPTION:

GATCTTAAT CAAGCACTAT GTTAATACTG TAATATCAGA ATACTATGTT GCATTATTAA 60  
 AAATGTTCAA ATTGAATAGN TTAAAANGTT TTAAATNCT AAA 103

SEQ ID NO:4832

LENGTH:325

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05748

SEQUENCE DESCRIPTION:

GATCCTTGGT GCTGTGTGCC CCACTCCAGT CTGGGGACCC CACTTCANAA GGTAGGGGCC 60  
 GTGTCCCCGG GTGCTGACTG AGGCCTGCTT CCCCCCTCCCC CTNCTGCTGT GCTGGAAATTC 120  
 CACAGGGACCC AGGGCCACCG CAGNGGACTG TNTCAGAAGA CTTGATTTT CCGTCCCTTT 180  
 TTCTCCACAC TCCACTGACA AACGTCCCCA GCGGTTCCA CTTGTGGGCT TNAGGTGTTT 240  
 TCAAGCACAA CCNACCACAA CAAGCAAGTG NATTTAAGG GGGTTGTGCT TTTTGTTTN 300  
 GTGCTAACGT CTNACTAATT TTAAN 325

SEQ ID NO:4833

LENGTH:212

TYPE:nucleic acid

TOPOLOGY:linear

2153480

CLONE:HUMGS05749

SEQUENCE DESCRIPTION:

GATCTGAAGA GAAGCCAGAG TATAATTNC TACTATTTTC AATACAAAGN TGTGTTTCA 60  
TTACAATTAG NGGAATATAG GCTTCTGTGA GCTAGCCTGG AAGCAAACAT AATCATTATT 120  
GTNCATTGTT TCTGTGNAN ACTGTAATGC TGTTTCTAAA TATTGACCTA ACANTAACT 180  
CTGNGGAATT CATGCTTGTN ACTGGNTGGA AN 212

SEQ ID NO:4834

LENGTH:284

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05751

SEQUENCE DESCRIPTION:

GATCTGGCCT TATGCCAGG CCTGGCCCT CAGAAAGTAA GAGCTCTGGG AAAGAACCCA 60  
AGGAGTTGGG GGAAGGAGAG AGCCCCAAAT AAACACAACC TGAGACCCCA AAGTTTTAAG 120  
GTGNAAAANG NACCAAAGAC CAGNCACAGT GGCTTCCGCC TGTAATCCCA NCATTTGGG 180  
NGGCCAAGGC GGGAGGACTG CTTGAGGCCA GAAGTTGGNG ACCATGCCTG GGCANCCTGG 240  
NCACCTCATT TTTACTACAA ATNAAANAAN CTTCGCTGNG TAAA 284

SEQ ID NO:4835

LENGTH:60

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05752

SEQUENCE DESCRIPTION:

GATCCTACTG ATGAAATTCC CACTAAAAAG TCAAAGAACG ATAAAAAGCA CAAAAACAAA 60

SEQ ID NO:4836

LENGTH:144

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05754

SEQUENCE DESCRIPTION:

GATCAAAAAA TTGAATGATA AATATGAATG GCTTTCAAT TCTGTGGACT TTGTACCATT 60  
TGGCTTCACC TTGTACTGCA AGATGAATT GTAAACAAAA CAAAATTGGN CTGTCTGGAA 120  
AGCTAAAGTN CTGAAATATG GAAA 144

SEQ ID NO:4837

LENGTH:138

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05755

SEQUENCE DESCRIPTION:

GATCACAAATG ANGCCAAGC TTGCNCGNT AGAGGCCAG GAGCAGGCCT TCCTGGCTCG 60  
TTTCAAAGGC CAGGACCCCTG GGGCCCTCA ACTGCAGTCA GAGAGCAAAG CCCTTAATAA 120

01486

2153480

ATATTTNACA TCCTTAAA

138

SEQ ID NO:4838

LENGTH:84

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05756

SEQUENCE DESCRIPTION:

GATCTTGTTC ACATCTTGCT CACTGCTATA TTCTCATTGC TGAGCACACA GTTGCAGCTC 60  
AATAAAATTT GAATGAACTC CAAA 84

SEQ ID NO:4839

LENGTH:114

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05757

SEQUENCE DESCRIPTION:

GATCACCTNA TGGATGTCGC AATAATACAA ACCAGTGTAC CNCTGACCTN NTCATCAAGA 60  
GAGCTGGGGT GCTTTGAAGA TAATCCCTAC CCCNCTCCCC CAAATGCAGC TGAN 114

SEQ ID NO:4840

LENGTH:323

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05758

SEQUENCE DESCRIPTION:

GATCTGCACT ATNAACATTG TGAAGAGTTT CTCCTAAAAA CTTTAAGTAA AATGTTAATG 60  
GTAGCTTG AAACATCAAA TTCTAAGGGA GAAAAAAACA ATATTAACC GCCCAAGCAG 120  
TGTGCCCTAG CAGAGGAAAA TGCAACATCT CGCAAGCGCT GCTGTAACGC CTTCAGGAGT 180  
CACTGATTCA GCACTAGTTT CCGGCTGTGA AAACTCATCT TTCATTTTN CCGTGGNTNG 240  
GCGCTTTNT TANTNGTNGT CCTAAATGANA TTTCTGNAT TGTCAATATAC AANCNTGAA 300  
TATCATAAA ANTTTTNAN TNN 323

SEQ ID NO:4841

LENGTH:121

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05759

SEQUENCE DESCRIPTION:

GATCAAAAAA ACGTTCTTG AAGAGCTGGC AGTAGAAGAT AAACAGGCTG GGGAAAGAAGA 60  
GAAAGTNCTC AAGGNGANGG AGCAGCAGCA GCAGCAACAG CAACAGCAGC AGCAANANAN 120  
N 121

SEQ ID NO:4842

LENGTH:351

01487

**2153480**

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05763

SEQUENCE DESCRIPTION:

GATCTTCACC AGCTGCTCGT GGTGGCTCGG TGTCTGTCTC TCAGTGCTGG TCAGACAACG 60  
CTGTCAAGAG ANCAGATGGCT GAGAGCAAAG CAGCTAGAGT CTTAAAGAAG AACGAGGCTT 120  
CAGCAGCAA AATGTGTGAA TGGAAATNAA CTTAAAGAT GTAATACCTA TGAAGAGTAA 180  
TGGGCAAACAT GTAGCCACAT ATTGTAAAAA TTCAAGATATT CATTATACC ACATTGTTT 240  
ATAGGTAATT TCTATCACAA ACCAGTGACA TTCCTGAAA TCANGCCTGG TAACACCTGA 300  
TGTATATG ATATTCAAGTA AGGACTTTA CCTTACTGAT TTCATGGNGN N 351

SEQ ID NO:4843

LENGTH:71

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05765

SEQUENCE DESCRIPTION:

GATCTGAATT TCCCCATGCT TCCTGGTTT NATATGTTTC TTGACAAATA AAGCTGATT 60  
AAATCTCTAA A 71

SEQ ID NO:4844

LENGTH:111

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05767

SEQUENCE DESCRIPTION:

GATCTTTTC TTTATCTCCC TTCCCTTCC TAAGTCCCAT TTCTTGGTCA TAAATATTGC 60  
ATTATTCAACA CTTTCAAAC GTGTATTTTC TTACAATAAA AAATGATGAA A 111

SEQ ID NO:4845

LENGTH:202

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05768

SEQUENCE DESCRIPTION:

GATCTCACCA CCCACCTGGC CTCGCAGGGC GTTCATCTCC TCCTCGTGGT TCTTCTTCAG 60  
GTAGGCCAGC TCCTCCTGTA GGTTCTCAAT CTGCATCTCC AGGTGGCTC TGGCCAGGGT 120  
CAGCTCATCC AGCACCCCTGC TTCAGTCCCT TCCCCATGCT TCCTTGCCTG ATGACAATAA 180  
AGCTTGTGTA CTCAGCTATA AA 202

SEQ ID NO:4846

LENGTH:262

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05769

**01488**

2153480

SEQUENCE DESCRIPTION:

GATCANAACC CTAGCGCCCTT TGGTCCTAAG AATGGNAGGC TGCCCTCCNT CCCAATCTCC 60  
CTGCCAGGGC CCACAGCGTG GCCCTAGCCC TCCCCTCCCC GGAATGTAGA ACGGGGACCC 120  
TCGCAGGGTT GGGGCGGGGG CTGATACTCC TNNGNCCCTC CCTACCCCTGC CCTGTGTGTT 180  
GGCTTTNTGG CCGTCCAAGT GCCAATTGGG TTTNGCCA AATAAGGGCT GGTATTNTN 240  
CTNTGTNCTT GGAGGTGNGN TN 262

SEQ ID NO:4847

LENGTH:250

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05770

SEQUENCE DESCRIPTION:

GATCTGTATG TNAGGCACCC ATAACAGTAG TTTCCCTGT NAGTCGTCTT CACACATGCT 60  
GTTTTCTCTG CCTGGCTCTC TCTTCCCTC CTTACCTGGC CAGTCCTGTT TATCATCAGG 120  
CCTTGTNTG GATATNACGT CCTCTGGAA GTCTTCTGGG NCCCTCTAAC CTAGGACCC 180  
CATTACCGGN TCTCATAGNA CAGTCTACTG NTTGTACGG AATTCTAAGT ATTCNNGTG 240  
GNACTNAATN 250

SEQ ID NO:4848

LENGTH:227

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05772

SEQUENCE DESCRIPTION:

GATCATTCTT CAATTAGGAC ACAAAACCAGA CAGGTTAAC AGCGAATCTA ATTTNAATT 60  
CTGACCATGG ATACCCATCA CTTGGCATT CAGTGCTACA TGTGTATTTN ATATAAAANT 120  
CCCATTCTT GANGATAAAA AAATTGTNAT TCAAATTGTT ATGCACAGAA TGTTTTGGT 180  
AATATTAATT TCCACTAAAA ANTTAANTGT NTTTAAGGG ANNNGAN 227

SEQ ID NO:4849

LENGTH:231

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05773

SEQUENCE DESCRIPTION:

GATCTAAATA TAAGAGCAAA ACCATAAAAG CATCTAAAG TAATTGAAGG AGAAAATCTT 60  
AGTGCCTTT GTNCTGGCCA AGATTTTA AAGAGGACAT AGAAGTCAGG AACTATAAAA 120  
GAAACAATT TAAATTTNC TTTATCAAAA TTAAAAGCCA TAGACCGGGGA TAANNCATTT 180  
GCAANATATA TNTCTGACAA AGTTCTTGAN TCAAGANTAT GTAANANCNG N 231

SEQ ID NO:4850

LENGTH:128

TYPE:nucleic acid

TOPOLOGY:linear

01489

2153480

CLONE:HUMGS05774

SEQUENCE DESCRIPTION:

GATCAGCCTG AACAAACATAA TAAGACCCTG TCTCAACAAA AAATACAAAA ATTAGCTGGG 60  
TGTGGTGGCA TATGCCTGTA GTCCCAGCTA TTCAGGAAGC TCCATTGCAA TCTAGCCGG 120  
GTGACAAA 128

SEQ ID NO:4851

LENGTH:350

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05775

SEQUENCE DESCRIPTION:

GATCCTTCCT TCAACCCCAA GGCCAGCTCC CATCTCATTT CCAGAAAGGC TCATACCTGG 60  
CTTGCAAGGGA AGCATCTGTC TTGTCATTCC AGGTGCCAGA ATCCTCTCAG AGTCATTGAA 120  
GGGTGTTCAC CCATCCCACC CAAGGCTTGG CACACTGCCA GTNTCTTAGC AGGGTCTTGT 180  
GAGGGCTGGG GGCATCCAGG CACTCAGAAG GCAAAGGAAC CACCCCTACCC ATTTGGCCTC 240  
TGGAGGGGGC AGAAGAAAGA AAGAACCTC ATCCTATATT TTNCAAAGCA TGGGGGTTCT 300  
NGCATTAGC TCTGGNGGT GANCCANTGT GCTTNCTGN TTAAGTGTGN 350

SEQ ID NO:4852

LENGTH:355

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05776

SEQUENCE DESCRIPTION:

GATCTCAGTT TCCCTCACTC AGGAACCTCTG TTTCTAAAGT CTTCAGTTAA GTTNAGTTT 60  
ATNACTGAGT GGCCTGTACT GTCAGACGTG AATGGGCCTG ACGGGCAAAT CCATCCCTCT 120  
CTCCCTCACA GTTCCAGGAG CGGCTCCCT CGTCTCCCCCT TACTCCACAG GGAGCCTCCC 180  
TTGCCAGGAC CAGGGCTGCG ACGGCCATGC TGAGGAGGT GAGTGCTCTG TTAGCTGCTC 240  
CCAGTGCTGT CCNCAGGCTG CAGTTCTGGT CCNNGGGGTG TNAGGGTAGG GAAGGGTGCA 300  
CTTGAAGGAN GGTGGTTCAA TTTGGGNTN CCTTAACGTT TATAGTCTNN ACAAN 355

SEQ ID NO:4853

LENGTH:81

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05777

SEQUENCE DESCRIPTION:

GATCCAGGAG TTTAAGGTTA CAGTGAGCTA TGACCGCTAC TNCACTCCAG CCCAGNCAAC 60  
AGAACAAAGAC CCTGTTCAA A 81

SEQ ID NO:4854

LENGTH:136

TYPE:nucleic acid

TOPOLOGY:linear

01490

2153480

CLONE:HUMGS05778

SEQUENCE DESCRIPTION:

GATCCTCCGT AACATTNCNA GACCAGANAG AACATCCAGA AATCCCTGGN TGGAAGCTCA 60  
GGCCCCGGGG CCTCCAGCGG CACCAGCGGA GACCACGGTN AGCTCGTCGT CGGGATTGCN 120  
ACGATTAAG ACTGAN 136

SEQ ID NO:4855

LENGTH:108

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05779

SEQUENCE DESCRIPTION:

GATCAAATAT TTTTNATTAA CCTATATAAA GAATTTGACT GCTTATGATT CAATACATAT 60  
GATTTAATAA AATAGATTGC ATTTTNAAA ATAAAGAATG ATTNGAAA 108

SEQ ID NO:4856

LENGTH:362

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05780

SEQUENCE DESCRIPTION:

GATCAACCTC TGATTTACA TCATGATGTA ATCACCACTG GAGCTTCACT GTTACTAAAT 60  
NATTAATTTC TTGCTCCAG TGTTCTATCT CTGAGGCTGA GCATTATAAG AAAATNACCT 120  
CTGCTCCCTT NCATTGCCAG AAATTGCCAG GGGCTTATTT CAGAACAACT TCCACTTACT 180  
TNCCACTGGC TCTNAAACTC TCTAACTTAT ANGTGTTGGT GAACCCNCAC CCAGGCAGTT 240  
ATCCATGAAA GNACAACTGG ACTAGTNCTA TGNNGTACAA AGGCCTGTAT CNTCTTGNG 300  
ATGGATTTC TGGTGTCTT NGCTGTGGT CAAGTTGCTT AANTTAAAGG CAGNTNTTN 360  
TN 362

SEQ ID NO:4857

LENGTH:102

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05781

SEQUENCE DESCRIPTION:

GATCCTACCG GAAACCAACC TGTTTACTGT ACTGTTGTAATATCATGCC CTTTATATCC 60  
TGTATATTGG CTTCTTTAA ATAAAGTCAA ATGTCTTAGA AA 102

SEQ ID NO:4858

LENGTH:195

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05782

SEQUENCE DESCRIPTION:

GATCTAAACT TTATGCTGCA TAAATCACTT ATCGGAAATN CACATTCAT AGTGTGAAGC 60

01491

2153480

ACTCAANNTN TAAACCTTAT TATCTAAGGT AATATATGCA CCTTCAGAA ATTTNTTTC 120  
GAGTAAGTAA AGCATATTAG AATAATTGTG GGTTGACAGA TTTTAAAAT AGANTTTAGA 180  
GTATTTGGGG TTTN 195

SEQ ID NO:4859

LENGTH:210

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05783

SEQUENCE DESCRIPTION:

GATCCCTTG AAATNTTTT TTTGTTGTT TGTAAATC AAGCCTGAGG CTGGTGAACA 60  
GTAGCTACAC ACCCATATTG TGTGTTCTGT GAATGCTAGC TCTCTNGAAT TTGGATATTG 120  
GTTATTTTT ATAGAGTGTA AACCAAGTTT TATATTCTGC AATGCGANCA GGTACCTATC 180  
TGTTTCTAAA TAAANCTGTT TACATTCAA 210

SEQ ID NO:4860

LENGTH:139

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05784

SEQUENCE DESCRIPTION:

GATCTTTGTT TGTCTGAACA GGTATTTTA TACATGCTTT TTGTAAACCA AAAACTTTA 60  
AATTTCTCA GGTTTCTAA CATGCTTACC ACTGGGCTAC TGTAAATGNG AAAAGNATAA 120  
ANTTATTTAA TGTTTAAA 139

SEQ ID NO:4861

LENGTH:150

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05785

SEQUENCE DESCRIPTION:

GATCCTGAAA GAATAATTGG TGCCACAGAC AGCAGTGGAG AATTGATGTT TCTCATGAAA 60  
TGGAAAGNT CAGATGNNGC AGACTTGGTG CTGGCGAAAG AGGCAAATAT GANGTGTCT 120  
CAAATTGTAA TTGCTTTTA TGNNNGNGN 150

SEQ ID NO:4862

LENGTH:155

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05787

SEQUENCE DESCRIPTION:

GATCGCAGAT TTNTNTAGAA ACACGGATGT NCATGTCCAG ATTCCCTTT NCAGGTATTA 60  
AAAATAATTA AAAATAGTCC TGCCTGAGGT TGCAGTGAGC CGAGCTTGCA CTACTGCACT 120  
CCAGCCTGGG TGACAGAGTA AGACTCCATG TCAAA 155

01492

2153480

SEQ ID NO:4863

LENGTH:262

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05789

SEQUENCE DESCRIPTION:

GATCTGTACA ACTGATTAA AAAAAATGCT ACAAAAAGCC CCAAAGCATA TAATCTCTAC 60  
TCCTTACAGT CTCTAGAATT AAATGTACTC ATTTAGACAA CATATTAAT GCATATTNA 120  
GCCACTTTAG AGAAACCTCA TAGGCACAGA GTTTCCAAGN TTAATTTAA GNATATCTTC 180  
ACGAACTTGA CCCTCCTACT CCACATTGCA NCATTTCCNT CAGNCAGCAT TTNAATTCCN 240  
GTATTATGTN TNTNGCAANT NN 262

SEQ ID NO:4864

LENGTH:232

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05790

SEQUENCE DESCRIPTION:

GATCAAGAACG GCCACTGGTG TGCAGGTGTT AGGCTCCTAC AGGCCCACTC TCTTCAGCAG 60  
CCACCCGGCC CTCCCTCCAG CACCGTTTT AATCCCACAG AACAAACGGGA ACGTTACTGA 120  
CTCTGGTGCC TTATCTCGAA GGGACCAGAA GTGCTGCGTG TTCAGGCCAT CNNTGGCTGT 180  
NTTCCGTCT CTCCGTCTG TCCACCTACT ACTNNNTNCT NTACTTTANC NN 232

SEQ ID NO:4865

LENGTH:76

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05792

SEQUENCE DESCRIPTION:

GATCAGAGCC GACACCAGAC GTGATTAGCA GGCGCACAAAN ATTCAATTG TTAAATGAAA 60  
TTGTATTTG CCCAAA 76

SEQ ID NO:4866

LENGTH:80

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05793

SEQUENCE DESCRIPTION:

GATCTCTGG GCCCAGGACT GTTGATGCCT TTNAGTTTG TATTCAATAA ACTTTTTTG 60  
TCTGTTGATA ATATTTAAA 80

SEQ ID NO:4867

LENGTH:149

TYPE:nucleic acid

TOPOLOGY:linear

01493

2153480

CLONE:HUMGS05794

SEQUENCE DESCRIPTION:

GATCCATGCA TTATTTCCCT AGCTTCCTGC CTTGCTCCCT ATTCACTTAA CACTGTGAAA 60  
GGTGGGGGGGT GAGTCCCACT TGAGCGCTTC CTGTTGAATA AAGCAGGCAC TTGACCTGGC 120  
TGTAGCCTAG GTCTTGAGTG AACCCAAA 149

SEQ ID NO:4868

LENGTH:209

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05795

SEQUENCE DESCRIPTION:

GATCATGTCT GTACATTGTG TAATGAATGA AAAGCACATA AATNTAATCT ACTTTGAAC 60  
TTGTAAAAAT AATGTGTGGA GGCTATTCTT GTTTCTCCAT CTCAAGTCCT GTGTGTGCAC 120  
GTGTGTGCAA GTGCACATGT GTGTGTGAA TAACACATTG TAAAGANCAG AAATNACTT 180  
AAAAAAATAAA CAGAAATGGA GACCTGAAA 209

SEQ ID NO:4869

LENGTH:335

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05796

SEQUENCE DESCRIPTION:

GATCCGNCCA CCTTGACCTC TCAAAGTGCT GGGATTACAG GCATGAGCCA TCACGCCCGG 60  
CCACCGCTGTT GGTTCTTAAT GACACAGCTT ANCTTTATTG TGAAAAGATT GCAGCAACAA 120  
ATGAGATTTC ACCTGTATTG GTTAAAATG CTATCCTTG TCTAAGACTG GCAACATAAG 180  
CAGTTCTTNG GCTTCTATGC CAATGGNCAC TAGGCAGTAA TACATGTGCA GTGCTANATA 240  
GAAAATATTG GAGTNAGGGT GTACTNAGGG AAGTTCTAA TCTTNCCTT NTCANTNTCT 300  
TCTGTAATAG TAACCTTNAATTAACATGNGG ATTCA 335

SEQ ID NO:4870

LENGTH:207

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05797

SEQUENCE DESCRIPTION:

GATCTTCTG CAGGAAATAG TCACTCATCC CACTCCACAT AAGGGGTTA GTAAGAGAAG 60  
TCTGTCTGTC TGATGATGGA TAGGGGGCAA ATCTTTTCC CCTTTCTGTT AATAGTCATC 120  
ACATTTCTAT GCCAACACAGG AACAATCCAT AACTTTAGTC TTAATGTACA CATTGCATT 180  
TGATAAAATT AATTTTGTG TTTCAAA 207

SEQ ID NO:4871

LENGTH:208

TYPE:nucleic acid

TOPOLOGY:linear

01494

CLONE:HUMGS05798

## SEQUENCE DESCRIPTION:

GATCTGTCAC GGAAGGCCTC CTTTTCCCTT GTAGCTAACG TTAGGCCTGA GTAGCTCCCC 60  
 TCCATCCTTG TAGACGCTNC AGTCCCTACT ACTGTGACGG CATTCCATC CCTCCCCCTGC 120  
 CGGGGAAGGG ACCTTGAGG GACCTCTCCC TCCAAAAAAA GAAAAAAAGA AAAAGANAGA 180  
 AAAANTAAAT GAGGAAACGT GTTNCAAA 208

SEQ ID NO:4872

LENGTH:84

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05799

## SEQUENCE DESCRIPTION:

GATCAGACCA TAATGTTACA TTATTATCAA CAATAGTGAT TGATAGAGTG TTATCAGTCA 60  
 TAACTAAATA AAGCTTGCAA CAAA 84

SEQ ID NO:4873

LENGTH:337

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05801

## SEQUENCE DESCRIPTION:

GATCCTGGCC GAGGTGAGGA ACAGACAGGG GGGGTCTAGA TTCTAAGGGG GTTGGTGGAT 60  
 ATTGGGCAAG GCAGGAAACC TCTGGAGACC TCATTTCTC CATGGGGAAAG ACAGCCATGC 120  
 TCTTCAGGAG GAGACTCCAA GGGCAAAGNA GGGTGTCTTG GCTGTNCTTG AAGGCAGAAC 180  
 CCTGCCATAT CCCCAGTGC AGTCCCTCA GNCTGTGGTG GCCTTGATC CTGACTGGAT 240  
 GTTCTCAGCC CNTTGTCTG GGCAAGAAC CAGAGCTCCC CAGTNTGGAT ACTTATAAA 300  
 CCTNTTTGGA GNCGNCAAATA NAAAAAAANA AANNAGN 337

SEQ ID NO:4874

LENGTH:329

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05804

## SEQUENCE DESCRIPTION:

GATCCAGGGG CTGATTGGCA GCGTGGAGGA GCAGCTGGCC CAGCTTCGCT GCGAGATGGA 60  
 GCAGCAGAAC CAGGAATACA AAATCCTGCT GGATGTGAAG ACGCGGCTGG AGCAGGGAGAT 120  
 TGCCACCTAC CGCCGGCTGC TGGAGGGAGA GGATGCCAC CTGANTCAGT ACAAGAAAGA 180  
 ACCGGTGACC ACCCGTNAAG TGCCTACCAT TGTGGGAAGA GGTCCAGGAT GGNAAAGGTN 240  
 AATCTTCTTC CGTGNAGCAN GGTNCAACCA GACCAACCGT TTGAGGGACT TANGTTACCN 300  
 NGNGCCGGGC CAACCNAAGG AGGGNNNTN 329

SEQ ID NO:4875

LENGTH:142

TYPE:nucleic acid

2153480

TOPOLOGY: linear

CLONE:HUMGS05807

SEQUENCE DESCRIPTION:

GATCACTTGC TTTTATGTCC ACTTTTNAG TGGTACTTAA ATGTAAGTA ACAACCTGAA 60  
TTGAGTCATT GCTTCTGAA GGAATCATTG TCCTTCTCC AGTTTTGTN CCAGAATAAA 120  
AGGAAATATT TAAAAGCCA AA 142

SEQ ID NO:4876

LENGTH:331

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS05808

SEQUENCE DESCRIPTION:

GATCCTNCAG CACAGGAATT CTCAGACCT GAGTATTTT AATAATAGGA ATGTCCACCA 60  
TGAACTTNAAT ACGBTCCGTGT GTCCCAGATG CTGTCATTAG TCTATATGGT TCTCCAAGAA 120  
ACTGAATGAA TCCATTGGAG NAGCGGTGGG GNACTAGCCA GACAAAATTN NAGANTACAT 180  
AANCAACGCA TTGCCACGGN AACATACAGN GGATGCCTT TCTGTGATTG GGTGGGATT 240  
TTTCCCTTT TATGTGGGAT ATAGTNGTTA CTTGTGACAN GTATAATTN GGAATAATTN 300  
CTATTAAATA TCANCTCTGA NGNTACTNGT N 331

SEQ ID NO:4877

LENGTH:61

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS05810

SEQUENCE DESCRIPTION:

GATCATGCCA TTGCACCCCCA GCCTGGCAA CAACTTAAC TTTTGAAAC TCTGTCTCAA 60  
A 61

SEQ ID NO:4878

LENGTH:81

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS05813

SEQUENCE DESCRIPTION:

GATCCTCTGG ACACGTAACC TATGTCAGNC ACTACATGAT GACTCAAGGC CAATAATAAN 60  
GCCATTTCT ACCTGCACAA A 81

SEQ ID NO:4879

LENGTH:102

TYPE:nucleic acid

TOPOLOGY: linear

CLONE:HUMGS05814

SEQUENCE DESCRIPTION:

GATCCANAGA GGACCCCCGN CCCCAGAGAC TTGGTTTGG CTCCAGCCTT CCCCTGGCCC 60

01496

CGTGACACTC AGGAGTTAAT AAATGCCTTG GAGGAAAACA AA 102

SEQ ID NO:4880

LENGTH:66

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05815

SEQUENCE DESCRIPTION:

GATCAAAAGG TCTCAGATGA TGATAAAGAA AAGGGAGAGG GAGCTCTTCC AACTGGAAA 60  
TCCAAA 66

SEQ ID NO:4881

LENGTH:287

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05816

SEQUENCE DESCRIPTION:

GATCTCTAGA GTCCATTAAA AGCAAGCTAG ATTGAGAGCT CTTGGAGGGC AGGGACTGGG 60  
CCTAGCTCAT GGTTTACAGC TCTTGAGGGT GACTGCACAG TGGACTCAGT CAGTCATGGC 120  
TGAGTTGTGT TGGCTTNATT ATCTCTAGAA TGTAGTTCTC CATTCAAATG CAAATCAGCC 180  
TGGNNNGNTC ACCTGTAGTA AAGGGGGTTT CTACCTNGNG GATGGAAANA GNNTCTTAG 240  
GNACCTTCCT TGGGCCTCCA GNACTTATTN TNGATATCCC NTTATGN 287

SEQ ID NO:4882

LENGTH:74

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05817

SEQUENCE DESCRIPTION:

GATCATAACCA TTGCACTCCA GCCTGAGTGA CCTGACTGAG ACTGTCTCAA AAAGNGTAAA 60  
ANATAAAAAT TAAA 74

SEQ ID NO:4883

LENGTH:106

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05818

SEQUENCE DESCRIPTION:

GATCTNACTC CAGCAGAGTC TGTNCCAATN TGGGGTGAGC AGGGCCCTG CCATGGAGCA 60  
GCAGGAATTN NAGGGATGGA GCAGGTTAAA GAATGGAAA CATAAA 106

SEQ ID NO:4884

LENGTH:96

TYPE:nucleic acid

TOPOLOGY:linear

2153480

CLONE:HUMGS05819

SEQUENCE DESCRIPTION:

GATCTTAGTG GTGAAAGTAT GTGTAACCAT GTGATGGTTA AACANGACT TACAATNCCT 60  
AAATGTGTAAC CTGAGAATAA AACGTACTCT NTTAAA 96

SEQ ID NO:4885

LENGTH:63

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05820

SEQUENCE DESCRIPTION:

GATCCNAAGN CTCCGGGCAG CCGTTATCCC GTGGTTAAC AAAGCTNCCG CGCGCTCACC 60  
AAA 63

SEQ ID NO:4886

LENGTH:61

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05821

SEQUENCE DESCRIPTION:

GATCCTGCTG TGTGTCTGT TCCATGTTCC GGTTCCATCC AAATACACTT TCTGGAACAA 60  
A 61

SEQ ID NO:4887

LENGTH:274

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05823

SEQUENCE DESCRIPTION:

GATCTCCTTG TCAGGAGCAC CTAAGAACTG GCATGACTCT ACACCCNTTC TCCTTCTNCA 60  
ATGACCTCGT GTCAAGATGG CAGACCTGCA GAGATGAATT TGCCCTNGATA CCTGAGTCAC 120  
CAGNGNGGAG GAAACTCCCA TTNGACATGC ATCACACTCC ACATATGAAA CCCTNCTTT 180  
GCTGCACTGT CACTGGGGGN TAGGGGTTAT TACTCACTGC AACTTAGCCT AGCATTAAGT 240  
TGNTTGACT NATNCANGTT TCAGTAAANG TCGN 274

SEQ ID NO:4888

LENGTH:268

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05824

SEQUENCE DESCRIPTION:

GATCTGTGTT GGTTTCTTAG ATTGCTAGCT TTTCTCCAG GGGACCACAG CAGGTGAAGC 60  
TCAAGAGCGC ATGGCTCTGC TAATAGTAAA TTGTTTCAG GGCTTGTCC AGCTGAGAGC 120  
TTCATGTCCA CCAGATTCTG AGAGGTGTCA GCAGCACTTT TTTTTNATT TGTNGTTNGG 180  
TTCCCNCCCG GTTATCGGAC CATGGGCTNA GCTCAGGCAC TTGCTGTAGG AGACTNGNNA 240

01498

TTNCTGTAAA GGANNGTNA TTTANCCN

268

SEQ ID NO:4889

LENGTH:323

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05825

## SEQUENCE DESCRIPTION:

GATCAAAC TT GGTCTGGTA TTGATGAAGA TGACCCTACT GCTGATGATA CCAGTGCTGC 60  
 TGTAACTGAA GAAATGCCAC CCCTTGAAGG AGATGACGAC ACATCACGCA TGGAAGAAGT 120  
 AGACTAACCT CTGGCTGAGG GATGACTTAC CTGTTCAAGTA CTCTACAATT CCTCTGATAA 180  
 TATATTTCA AGGNTGTTT TCTTATTATT TGTNAATATT AAAAAGTCTG TATGGCATGA 240  
 CAACTACTTT AAGGGGAAGA TAAGATTTC TGTCTACTAA AGTGATGCTG TGGTACCTA 300  
 GGCACNAAG CAGNGCTAGT ATN 323

SEQ ID NO:4890

LENGTH:66

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05826

## SEQUENCE DESCRIPTION:

GATCTAAGAG TATGGCTAAA CATCTATATA TGCAATCTAT TAAAAGAACT TAATTGGCT 60  
 ATTAAA 66

SEQ ID NO:4891

LENGTH:89

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05827

## SEQUENCE DESCRIPTION:

GATCTCTGGA GCTCAAGAGG TTGAGGCTGC AGTGAGCCGA TGTGCCAGTA CACTGCAGCN 60  
 TNGGTGACAG AGCAAGACCC TGTCTCAA 89

SEQ ID NO:4892

LENGTH:344

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05829

## SEQUENCE DESCRIPTION:

GATGCCACT TACCGCAAGC TGCTGGAGGG CGAGGAATGC AGACTCAGTG GAGAAGGGAGT 60  
 TGGACCAAGTC AACATCTCTN TTGTCACAAG CAGTGTTC TCTGGATATG GCAGTGGCAG 120  
 TGGCTATGGC GGTGGCCTCG GTGGAGGTCT TGGCGNCGGC CTCGGTGGAG GNCTTGGCGG 180  
 AGGTAGCAGT GGAAGCTACT ACTCCAGCAG CAGTGGGGGT NTCGGCCTAG TNNNNNGGGC 240  
 TCAGTGTGGG GTGCTCTGG CTTCACTGCA AGCAGTAGCC NGAGGGCTGG GGGTGGNCTT 300  
 NTGGCANTGG CGGNTNTAGC AGNTCCAGCG TCAAATTTN CTCN 344

SEQ ID NO:4893

LENGTH:342

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05830

## SEQUENCE DESCRIPTION:

GATCAGGNAG CCTCCTGATG CCAGAACACC TNAGGCAGAG CCCTACTCAG CTGTACCTGT 60  
 CTGCCTGGAC TGTCCTCTGT CCCCGCATCT CCCCTGGGAC CANCTGGAGG GCCACATGCA 120  
 CACACAGCCT AGCTCCCCC AGGGAGCTCT GCTGCCCTTG NTGGCCCTGC CCTTCCCACA 180  
 GGTGAGCAGG GCTCCTGTCC ACCAGNACAC TNAGTTCTNT TCCCTGCAGT GTTTTCATT 240  
 TATNGGGNC AAACATTTG CCTGTTTCT GGTTCAAAC ATGATAGTTG ATATGAGACT 300  
 GAAAANCCCTG GGTTGTGGAG GGGAAATTGG GNTNAGAGGG GN 342

SEQ ID NO:4894

LENGTH:138

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05831

## SEQUENCE DESCRIPTION:

GATCCTGGAC TTTCCTCTCA GCAAAGATGC CTCCNTGGTG GTGACCACGT CAGGAGACCA 60  
 CAAAGCGAAA NTNTTTNTT TCCAAAGGCC TGACCGTTAA TGGCTGCAGC CCCTGCCTGT 120  
 TTGTNTGGTG TTGAGGGN 138

SEQ ID NO:4895

LENGTH:109

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05832

## SEQUENCE DESCRIPTION:

GATCCACCCG CCTCAGCCTC CCAAAGTGCT GGGATTACAG GTGGGAGCCA CAACACCCGG 60  
 CCATGAATTA ACTCCGTTAA AAAATAAACG TATACATTCT GTGAGCAA 109

SEQ ID NO:4896

LENGTH:274

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05833

## SEQUENCE DESCRIPTION:

GATCGGTTTC GCCATCATGA CGCAGTGTCT CCCAGTGGCC CTGTTCTCCC TGGTGGGCTT 60  
 CACCCAGATG ACCATNTGGG CCAAGGGCAA GCACCGCAGC TACCTGAAGG AGTTCCGGGA 120  
 CTACCCGCCCT TGCGCATGC CCATNATNCC CTTCTGCTC TGAGCGCTCA CCCCTGCTGA 180  
 GGCTCAGCCC CTNAACCCGG TGGCATTCTG GGGGAGGAGT GGGGCCCACA GNTCTCCAGC 240  
 ACCCGGAATA AAGCCCGNCT GCCCCAGTCG GAAA 274

## **DEMANDES OU BREVETS VOLUMINEUX**

**LA PRÉSENTE PARTIE DE CETTE DEMANDE OU CE BREVET  
COMPREND PLUS D'UN TOME.**

**CECI EST LE TOME \_\_\_\_\_ DE \_\_\_\_\_**

**NOTE: Pour les tomes additionnels, veuillez contacter le Bureau canadien des  
brevets**

2153480

## **JUMBO APPLICATIONS/PATENTS**

**THIS SECTION OF THE APPLICATION/PATENT CONTAINS MORE  
THAN ONE VOLUME**

**THIS IS VOLUME 5 OF 8**

**NOTE: For additional volumes please contact the Canadian Patent Office**

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2153480

## **JUMBO APPLICATIONS/PATENTS**

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**THIS IS VOLUME 6 OF 8**

**NOTE: For additional volumes please contact the Canadian Patent Office**

2153480

SEQ ID NO:4897

LENGTH:343

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05834

SEQUENCE DESCRIPTION:

GATCTTGCTG GATGTGAAGA CGGGGCTGGA GCAGGAGATT GCCACCTACC GCCGCCTGCT 60  
GGAGGGCGAG GATGCCACC TTTCTCCCA GCAAGCATCT GGCCAATCCT ATTCTTCCCG 120  
CGAGGTCTTC ACCTCCTCCT CGTCCCTTTC GAGCCGTCAG ACCCGGCCA TCCTCAAGGA 180  
GCAGAGCTCA TCCAGCTTNA GCCAGGGCCA GAGCTCCTAG AACTGAGCTG CCTCTACCAN 240  
AGCCTNCTGC CCACCAAGCTG GCCTCACCTC CTGAAGGNCC GGGTCAGGAC CCTGCTCTNC 300  
TGGNGNAGTT TCCCAGGTAT NTTCNNTGGT TCCTGTTGGT GAN 343

SEQ ID NO:4898

LENGTH:338

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05835

SEQUENCE DESCRIPTION:

GATCAGNAGC CCCAACACA GGCAAGTCCA CCCATAATA ACCCTGCCAG TGCCAGGGTG 60  
GGCTGGGGAC TCTGGCACAG TGATGCCGGG CCCCAGGACA GCAGCACTCC CGCTGCACAC 120  
AGACGGCCTA GGGGTGGCGC TCAGACCCCA CCNTACGCTC ATCTCTGGAN GGGCAGCCC 180  
TGAGTGGTCA CTGGTCAGGG CAGTGGCCAA GCCTGCTGTG TCCTTCCTNC ACAAGGTCCC 240  
CCCACCGTTC AGTGTCAAGCG GGTGACGTGT GTTCTTTGA GTCTTGAT GANTAAAAGN 300  
CTGGAACCTN ANAAAAAGTG NGNNNGGNTN TNTGNTAN 338

SEQ ID NO:4899

LENGTH:356

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05836

SEQUENCE DESCRIPTION:

GATCAGCCCC TGACTTTNTT AAAAGATATC AGAAGTGTCT TGGAGCCAAC TAGAGGCAGG 60  
GTCATCCTTG CCCTTNTCTT CCCCTTTCAT CCCTATGTGG AAAACGTAGG TGGCAAGTGG 120  
GAGAAACCAT CAGAAATTTC GGAAATCAAA GGACAGAACT GGGAAAGANCA AGTGAATAGT 180  
CTGCCTGANG TTTTCAGAAA ANCTGGTTTT NTTATCGAAG CTTCACCAAG ACTACCATAAC 240  
CTGTNTGAAG GCGACATGTN TAANGNCTAC TNCGTTCTGG NTGACGCTNT CTTTGTCTC 300  
AANCCAGTAT AAACACGTGG NGGTGAAAGT CTTCAGAGTC CGTACCNNC TGGATN 356

SEQ ID NO:4900

LENGTH:111

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05837

SEQUENCE DESCRIPTION:

01501

2153480

GATCCCCAG AAAAGAAAGC TACAGAAGAA ACTGGGGCTC CTCCAGGGTG GCAGCAACAA 60  
TAAATAGACA CGCACGGCAG CCACAGCTG GGTGTGTGTT CATCCTTGAA A 111

SEQ ID NO:4901

LENGTH:293

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05838

SEQUENCE DESCRIPTION:

GATCTTAATG GGTCGATGG TAGGAAATAC GGAAAGGATA CACTGCTAAT ATTGTGTCTA 60  
ACAATAAAAGC AAACAACTCG ATGCTGTAAG AAGACAAGCT GTTGAGCTT TCAAACACAC 120  
AGGGGCACAG CACAATTCAAG AAATACCCAG GAGGATTCCCT GCAGGCTAA CAGTTGGCAT 180  
CGTACTGAAA TGAAACGTGT ATTAACANGA AANTGTCAAA CTTTTGGGGA AACAAATTT 240  
CTGTTACTTC CCACCCNACT AAAAGGGAAG ATAAAACCAT CATACCAGN NNN 293

SEQ ID NO:4902

LENGTH:99

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05839

SEQUENCE DESCRIPTION:

GATCTACATA AGGAAAGGAA GAATATTAAGA GAAGAAATAA ATGAAGACGA GATAAAATCT 60  
TTTTTCTTAA TTATCAAATA AAAGTTGTGTT AAAAGTAAA 99

SEQ ID NO:4903

LENGTH:290

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05840

SEQUENCE DESCRIPTION:

GATCAGGCAG TTCTGGACT GTTCCACAC TCAGAGTGAC CTGTCCTGT GTGAGGGCTT 60  
CAGCGAGGCC CTGAAGCAGT GCAAGTACTA CCATGGCTG AGCTCCCTGC CCTGAAGAGG 120  
TCGGTGCAGA CTCGGGGGCC AGTCCTGCAC NCACNTCTAC CCCTCGCCGA CAGCCAGACC 180  
ACAACACCAAG ATTGTACCCA GATAGCTGGG ATTGGAAGTN AGGAGGTTTC TCACCCACA 240  
GATAACCCAA GACACAAATG TGCAATTAAA AGTTTATTT AGACCACAAA 290

SEQ ID NO:4904

LENGTH:68

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05841

SEQUENCE DESCRIPTION:

GATCTGCCCG CCTTGGCTC CCAAAGTGCT GNGATTNCAG GCATGAGGCC CTGCATCAGT 60  
TCTGCAAA 68

01502

2153480

SEQ ID NO:4905

LENGTH:223

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05842

SEQUENCE DESCRIPTION:

GATCTGCAAG CNGGAGCCCT CCTACCGCA GCTTNAGCAC AGNATCATCC AGCCCTGGGG 60  
AGGCCACCC TTAAGCAATA CAGACTGGGC TGAGGCTGAC AGGCAGAAGA CTAACAGAGC 120  
GCANTCTGCA CACGCAAGTT CTGGGGCGAC CTCTGGCCCT GGNCATCTCT GNACTAACTN 180  
ATCTGAATTA TGGAAGGTGG CAGTNTGGT CANTAGTTT NNN 223

SEQ ID NO:4906

LENGTH:293

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05843

SEQUENCE DESCRIPTION:

GATCCGTCCG CTTCGGCCTC CCAAAGTGCT GGGATTACAG TCGTGAGCAC CGCGCCCGGN 60  
CTGNGGTCAA TTTCTATGT CAAGTGAGTG ACATTATTTT TACAAGTATT TTCTTCTTT 120  
TAAAATTATA CCAGCAAATA CAGTTAATGC AGAACCTAA GTAATTGAG TGTAGCTATT 180  
ACAATCTAT GTGAAGNNNN CAAAATAGAA TGACCAGTTT TATTATAAT TAAGGGCCTT 240  
ATTTTCTAA AAAAGNANAN AANTGAGCCN TATCTCTGTG TTTTATAATT ATN 293

SEQ ID NO:4907

LENGTH:65

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05844

SEQUENCE DESCRIPTION:

GATCACTTGA GGCCAAGTAT TTAAAACCAAG CCTGGGAAAT ACAGTGAGAC CTTNTNTCTA 60  
CCAAA 65

SEQ ID NO:4908

LENGTH:225

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05845

SEQUENCE DESCRIPTION:

GATCCTGAAG GCCTTCGAGT ATTTACTAT TTGGTACAAG ACTTGAAATG TTTNGTNNTC 60  
AGTCTTATTG GATTACACTT CAAGATTAAN CCAATTAAAT TTGTATGTNT TCAGGCTGTT 120  
TGTATATTNTT ATTAAGGGAT GGGAGGGGTT ATTTGTCTT TACAGTATTG GGGTTTTNAT 180  
GAATGTGAAG CAAACAANAN ANATTGTNT GTAAACTGTT TTNTN 225

SEQ ID NO:4909

LENGTH:135

01503

2153480

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05846

SEQUENCE DESCRIPTION:

GATCAGGTG GGGGGCAGCC CCCAGTCCCT TTCTGTCCA GCTCAGTTT CCAAAAGACA 60  
CTGACATGTA ATTCTTCTCT ATTGTAAGGT TTCCATTTAG TTTGCTTCG ATGATTAAAT 120  
CTAAGTCATT TGAAA 135

SEQ ID NO:4910

LENGTH:225

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05847

SEQUENCE DESCRIPTION:

GATCCAGTAT TTGATGAAAC TCATGAAAGT GGGTGGAGCC CATCTNGCC CTCCTCTTT 60  
CTAGGACGCA CTATATGTGA CTGTGACTTT CAAGGACATT TGGTGCCAT TTGCTGATT 120  
TTTTGGGAAG TNAATTNCTA ACTNCTTCA CTGATAATG NAGAAAAGTA TTGCACCNGT 180  
GAAATGCACC AAATGAATNG NGTTTGTAA TTAaaaaaaAN NTNTN 225

SEQ ID NO:4911

LENGTH:281

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05848

SEQUENCE DESCRIPTION:

GATCCCCTAA GGTCTGGCC CAGGNCTGCC CAAAGAGAAG CCCAGGATGG TCGGCTGCCT 60  
GGGGGCATTG TCACCACTGN GCCATGACGG CTGGTCCCNA CAGGNCCAGC TGGGAGGACT 120  
GGTTGTGCTG CTGGAGAAGG GCTGGAGAAG GCAATGGCAT GCTGCCGCTT TGCCAGTCCC 180  
TAGAAGTCGC GGTGCAGGTG ATGTGTNGNG AGCCGTNCCT NCANTGGCA GGCGNGGAG 240  
TNTACTTGTC TGCAAGCTGAC CCAAGGGCAG CCACATNTNN N 281

SEQ ID NO:4912

LENGTH:179

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05849

SEQUENCE DESCRIPTION:

GATCAAAACC CAGCAGAGTG CAAGCAGCAG TGAAGCAGGA TGTATGTGGC CTTGAGGATA 60  
ACCTGCAC TGCTCACCTC TGCTTCCCTG GAAAGGATGG ANTTTACATC ATTTGGCAA 120  
GGCCTATTTT CAAGGTTNT TTGGTNTGNT TGGNTNGCTT GTTTTGGNT TNTGGCAGN 179

SEQ ID NO:4913

LENGTH:313

TYPE:nucleic acid

TOPOLOGY:linear

01504

2153480

CLONE:HUMGS05850

SEQUENCE DESCRIPTION:

GATCGAGGGC TGGGNACCCC GGTGTNAGCA GGATGGGCC CTGCCCTCCC GTGGNAGTTG 60  
TGGACTCGAG CCCAGGGCT GCCCGTAACA GCGGTGTCCC AGGTCCCTGC CATCCNATT 120  
TACCTGGAAT GTCTTCCTG GAGTTGGAA TTGCTTGAGG AACCCCTGCGT GTGCTTGGAG 180  
AGGCCAGAGG GCTTGTGAG AACCCCATGG ACAGTGGAGA GCGGGATTG AACCAAGGGC 240  
TGGACTCCA CACCTNTGGC CTGCGTCGCC CAGTTCTTG TGGCTCTGAA GAATTGGNCG 300  
CTGTGGAAAA GTN 313

SEQ ID NO:4914

LENGTH:124

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05851

SEQUENCE DESCRIPTION:

GATCTTATGT GTTACAAAAT TGGAGAAAAGT ATTTAATAAA ACCTGTTAAT TTTTATACTG 60  
ACAATAAAA TGTTTCTACA GATATTAATG TTAACAAGAC AAAATAAATG TCACGCACT 120  
TAAA 124

SEQ ID NO:4915

LENGTH:313

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05852

SEQUENCE DESCRIPTION:

GATCCCCTGA ATGCCTTGG AGGCCAGTAG AGCACACAGG GTATCCACAT GTTACCCCTGC 60  
AGCTACATG TTGAGTTAGT GATGATATTG TATATGCTCA TGGTCTNAAC TGGATTACAA 120  
AAAGCAAATA CTAGAACAGC TAGTCATCT TTNACCCAAT GTACTTAGTA TTTTCNTGCA 180  
CTGGTTTAAT CATGNTTAAT ACTACAAANC AAAANTAANT ATTCACAGT GGTTGGNTTG 240  
TNTTGTTTT AANCCACAGT TNGANTTAGT TAGCCTGCT GGGGCCATAA TATGCTTCAG 300  
GGTGTGTAAN TGN 313

SEQ ID NO:4916

LENGTH:312

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05854

SEQUENCE DESCRIPTION:

GATCTGGGGA CTACCAGAGA CTCTGGAAA TGGACAAGGT GGGGGGCCACTCTTC 60  
TCCTGCAGTC CCGTAGCTGG GGCCCTCCCTC CTTCAGGG TCTCCCCAGC CCAGTCCCCT 120  
TGCTCCCATC CCACTCGGTG CTGTTGGTA GGGCCCTGC CAGGAACGTGA CCAGCTNAGC 180  
GAGGAGCCAT AATGTGCATA TGTGCACAAG CAGGGTTGG GGAGGGGNT GTGAGGGNT 240  
GTGCCAGGT GTGCCCTATCTCCTGGG GAGGGTGAGG NAGGGCAGGG ACAGTNTCCA 300  
GGGGTNAATT TN 312

01505

2153480

SEQ ID NO:4917

LENGTH:55

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05856

SEQUENCE DESCRIPTION:

GATCTAAATA TTCTGGTTG GATTAGGCAA TTAAAATTT TTTGGCAACA GGAAA

55

SEQ ID NO:4918

LENGTH:370

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05857

SEQUENCE DESCRIPTION:

GATCCAAGGA NC GTTGGNT TTCCCTAGCT ACATCTGGTA CCTTGGCTGG CATTATGGGA 60  
ATNAGGTTCT ACCACTCTGG AAAATTCAATG CCTGCAGGTT TAATTGCAGG TGCCAGTTG 120  
CTGATGGTCG CCAAAGTTGG AGTAGTATG TTCAACAGAC CCCATTAGCA GAAGTCATGT 180  
TCCAGCTTAG ACTGATGAAG AATTAAAAAT CTGCATCTTC CACTATTTTC AATATATTAN 240  
GAGAAATAAG TGCAGCATTT TTNCATCTGN CATTTCACCT AAAAANAAG ACACCAAANC 300  
TTGGCAGAGA GGTGGGAAAA TCAGTCATGT TTTACCAANC CTANCNGAGG TTGGCGTGTT 360  
TTGTTACCTN

370

SEQ ID NO:4919

LENGTH:168

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05858

SEQUENCE DESCRIPTION:

GATCTTGAAA GGAAGTATGC TGTCTCTAT CAGCCTCTAT TTGATAAGCG ATTTGAAATT 60  
ATTAATGCAA TTTATGAACC TACGGAAGAA GAATGTGAAT GGAAACCAGA TGAAGAAGAT 120  
GAGATTCGG AGGAATTGAA AGAAAAGGCC AAGATTGAAG ATGAGAAA

168

SEQ ID NO:4920

LENGTH:128

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05859

SEQUENCE DESCRIPTION:

GATCATGGGA GGGAGCTGAG GGGTTAATAT ATATACATAC ATACACATAT ATATATTNN 60  
GTAAATAAAC AGGAACGTAT TTNCCTGCCTC CATCCCACCC ATGAGGGCTG CAGGNACTAC 120  
AAGAGAAA

128

SEQ ID NO:4921

LENGTH:166

TYPE:nucleic acid

01506

2153480

TOPOLOGY: linear

CLONE: HUMGS05860

SEQUENCE DESCRIPTION:

GATCGGGTCC CCAGAGCCAC CATCTCCTGA GCCTCCACC CCGCTGCCTG GGCCCTGTGG 60  
TTGCTGGGCC TCCCACCTCA AGGAGGGAA GGTTGTACAG CCCGAACCCG TGGAGCAATG 120  
CCCTGTNTGG NCTCCAAAAC CAAAATAAAA CTGGTGTAC CTTAAA 166

SEQ ID NO: 4922

LENGTH: 97

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS05862

SEQUENCE DESCRIPTION:

GATCTTAAA CTGCTTATA CACTGTCACG TGGCTTCATC AGNTGTGTGC ATTCAGGAT 60  
GGTTTTAAA GNAACCTCAG AAAGNTATT CCTTAAA 97

SEQ ID NO: 4923

LENGTH: 211

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS05863

SEQUENCE DESCRIPTION:

GATCACAGAA AAATTAACCA TCCAAGTGCT CTCTAGATT GTTGATAAAC ATTTATGCT 60  
TGCATTTAAA CTTGAAATGT ATGAGCAGAA TGAGACAATC AGTTAAATCA GAAATGAGAA 120  
GTATTATAAT GTAAAGGCCT TGTGCTG TAGCAATANN ATGACCAAGT GCAATGACTT 180  
GATTTAATAA AATCATATNT TAAAAGTTAA A 211

SEQ ID NO: 4924

LENGTH: 338

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS05864

SEQUENCE DESCRIPTION:

GATCAACGCC TCACTGAAAC ATGGCTGTGT TTGCAGCCTG CTCTAGTGGG ACAGCCCCAGA 60  
GCCTGGCTGC CCATCATNTG GCCCCACCCA ATCAAGGGAA GAAGGGAGAA TGCTGGACTG 120  
GAGGCCCTG GAGCCAGATG GCAAGAGGGT GACAGCTTGC TTTCTGTGT GTACTCTGTC 180  
CAGTCCCTT AGAAAAAAATG GATGCCAGA GGACTCCCAA CCCTGGCTT GGGGTCAANG 240  
AAACAGCCAG CAAGGNGTTA GGGGNCTTAG GGCACTTGGG CTTGTTGTT CCCATTGAA 300  
NGGCGGNCTT NTGGGCCCTG GGCCCTTNAG GTTGGTN 338

SEQ ID NO: 4925

LENGTH: 259

TYPE: nucleic acid

TOPOLOGY: linear

CLONE: HUMGS05865

01507

2153480

SEQUENCE DESCRIPTION:

GATCCTGTCT TCTTTCATGT TTACTACGAG GCATGACATT CATGGCAAA CAGGGATGCC 60  
GTTTCCAAGA GCAGCTATAA AACAATCTGT TTTCCTAAAG ACAGCCACTC TGAGAAGGNG 120  
ATGANGGAAC ACGGCAGGGT TCATCANTTC ATAGACTGTT TCCAAAATA ATTTTAAAC 180  
TTTCCACTA GGCATCTGTG TCTTAACCA CTGCACANTG GCNTTGCTG TTTAATANAA 240  
GGTNNTCANN ACGTGGAAA 259

SEQ ID NO:4926

LENGTH:195

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05866

SEQUENCE DESCRIPTION:

GATCCACCCA CCTCGGCCCTC CCAAAGTTT GGGATTACAG GCACGAGCCA CAGTGCCAGC 60  
TGAAAACGTT TCCTAACAG AAGTGCAG AGCATGATGG AGCCCAGCCT GGGCTTGACA 120  
TTGGAGAGA ACTACAGAGA AGTATCCAGA CTGTTGTTAC TAATAAATAA ATACATAAGC 180  
TCCGCTGNAC GGAAA 195

SEQ ID NO:4927

LENGTH:56

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05867

SEQUENCE DESCRIPTION:

GATCCAACAA TAAAATATTA ATTATAAAAA AAGAAATTT AAAAGTAAC AAGAAA 56

SEQ ID NO:4928

LENGTH:82

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05868

SEQUENCE DESCRIPTION:

GATCATCCCTC CAAGCAGTCC TGTCATTCA TGTCTGCCCTC AAATTGCTGG TGAATACATA 60  
AAATAGTTAC TTGCTAATCA AA 82

SEQ ID NO:4929

LENGTH:286

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05869

SEQUENCE DESCRIPTION:

GATCCACCCG CCTCAGCCTC CCAAAGTGT GGGATTACAG GCAAAAGCCA ACACACCCGG 60  
CCTGGATATG AATTATAAT ACCCTACAGT GCAGCACAAG AAGATGCAGT CAAAGCACTG 120  
ATGTGAGGAA GTACTTGCCC CGTAGCAGCT ATTCACTCTA CCAGTGTAAA CAAACTCTAA 180  
GGCTAGGGCG GGGCAGCACA GGCACANGNN TATACTAGCC AGGGGTTAA TATAANTACA 240

01508

ACCAAGCATAG NAAGNCCAA ANCNTACAG NNNCAANAC CNGGN

286

SEQ ID NO:4930

LENGTH:311

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05870

SEQUENCE DESCRIPTION:

GATCTGTGCC CCATGCCTGT CCAGCCTGGG CAGCCAGGCT GCCAAGGCCA GAGTGGCCTG 60  
 GCCAGGGCT CTTCAGGCCT CCCTCTCTCT TCTGCTCCAC CCTTGGCCTG TTTCATCCCC 120  
 AGGGGTCCA GCCACCCCGG GCTCTCTGCT GTACATATTT GAGACTAGTT TTTATTCTT 180  
 GTGAAGATGA TATACTATTN TGNTNAAGCG TGTCTGTANT TANTGTGTGA GGANTGCTG 240  
 GGNTTCANTT CGNGTGNACG GTGGGAGAGN TTGGGTGCCG GNGAGAATNG ACGGGCTNAT 300  
 GGNTTCCTT N 311

SEQ ID NO:4931

LENGTH:305

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05871

SEQUENCE DESCRIPTION:

GATCAAAAAAA CTACCTATCT GGTACTATGC TTTTNATCTG GATGATGAAA TAATCTGTAC 60  
 AACAAACCCCT GGTGACATGC AATTACCTA TATAGCAAGC CTACACATGT GCCCCTGAAC 120  
 CTAAAAAAAAGA AGTTAAAAGA AAAACGTTTG GNTTATTTTC CCTCTTNGA ACAANGNCAT 180  
 TGGTTTGCCTT AAGGNCTACA AATAANCCAA CGGGAAAAAN GANAGGTTCC AGTTTTGTNT 240  
 GANAATTCTG ATTAAGCCTC TGGGCCCTAC AGCCTGGGGA ACCTGGNGAN TCCTACACCC 300  
 GGGAN 305

SEQ ID NO:4932

LENGTH:233

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05872

SEQUENCE DESCRIPTION:

GATCCAGAGA CACACAAGAG CACCAAAGCA GCTCATCCCA CTGATGACAC CACGACGCTC 60  
 TCTGAGAGAC CATCCCCAAG CACAGACGTC CAGACAGACC CCCAGACCTT CAAGCCATCT 120  
 GGTTTCATG AGGATGACCC CTTCTNTAT GATGANCACA CCCTNCGNAA ACGGGGTCTG 180  
 TTGGTCGNAG NTGTGCTNTT CATCACAGGG ATNATNATTN CTNACCAGTT GGN 233

SEQ ID NO:4933

LENGTH:276

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05874

SEQUENCE DESCRIPTION:

2153480

GATCTACTAA AACACTAAGT TTCATACTAA ACCGTTTCAT GTATCTTAT CATATTCTGT 60  
AAAGTTTACA CTTTGATGTA CCTGTATTT ATTGAAATAC TGTCCAGCTT CAAATGGAAC 120  
AATATTGTAT GTAGAAATTC CAATTACTGG TTTGTCAGTN GGATTCTTAG CTCTGTAAAA 180  
CGCCAGTGCA GTCTCTCCTG GCACCACCTG TNNTAAAGAG TATATATATN ATCAGTNCTT 240  
TGNNTCTCAC AAAGNGCCTC NNTTCCCTG CTAAGN 276

SEQ ID NO:4934

LENGTH:89

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05875

SEQUENCE DESCRIPTION:

GATCTGGTGG GCTGGGTCCC CCTCTCGACC NCAGACGCC CTAACTGCC CCTTCTCATT 60  
TTATACAATA AACATTCTCC ACCTACAAA 89

SEQ ID NO:4935

LENGTH:313

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05876

SEQUENCE DESCRIPTION:

GATCAGGAGT TCTAGGCCTGT AGTGTGCTAT GAGCACATCT ATGAATAGGC ACTGCGTTCC 60  
AGCCTGGGCA ACATAGTGAG GCCCCATCTC TAAAGGGC ACACGTGTAT AGGACAGCTC 120  
CATTATAATC TTATGGGACC ACTGTAATAT GTGTAATCCA TTGTTGACTG GAACATCCTT 180  
ATGCAGCACA TGACTGTGTA CATAACTTAA AATTATCAT TTAAACCATT TTTAAGTGT 240  
CAATTGGTG GTATAAAGTA CATTACATT ATTGTGTAAC TATCACCTCT ATCCATCTCC 300  
CTAACTTTT CNN 313

SEQ ID NO:4936

LENGTH:224

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05877

SEQUENCE DESCRIPTION:

GATCCGGGTT CAGAGTGACG TTTTCCTCA CAAGCAGAAG GTAACAAATT TCATGCTCTC 60  
CCTAAATTCT GTCTGATTTT GCCTNGTGGT GATAGATTGT CANGAACACA ATGTCCTCTG 120  
GAGAAATCTA TTGACAGAAA TTGGTGCAGT GTTANCAACG CTAATGTAAA ACACAGANTT 180  
TACAGAAAAT TAGAGAAAAT AAACACATT GTNNGCCTCA GAAA 224

SEQ ID NO:4937

LENGTH:314

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05879

SEQUENCE DESCRIPTION:

01510

GATCCTCTCT CCCAGGGAAT CCGACACAGG AGGAACCCCT TCTNTGGTTG ANCTGGGCCA 60  
 GGCCTAAGAG TAGCAGGAAC TCTAAGACCA CAGAGTTTT TATAATGTA TAAATGTATC 120  
 AAGCCAATN TGCAGATGCT AACTGGACAT TCTGGGGAAC TGGGCACCAAG GNGTGCCTTC 180  
 ATACACTGTA CCCCCAGCTCT NTTCTAAAAG AGAAGTNGGT GGGCACACTT GAACTGTTTG 240  
 GTGGNCNAAC CCACAGGANG CTGCAATTNT NTGGNTTAGG GTGATACTTT TGGCCCTNCN 300  
 TGTGGCCCT NTTN 314

SEQ ID NO:4938

LENGTH:143

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05880

SEQUENCE DESCRIPTION:

GATCTGAAAG TATAAAACTG CTAGAAGAAA ACATGGATAT TTGATTGGAC AATGATATTT 60  
 GGATATGACA CCAAAGCCT AGGCAACTAA TGCAAAAATA GACAGGGAGA GTACATCAAT 120  
 CTTAAAACC TTATGATGGC AAA 143

SEQ ID NO:4939

LENGTH:389

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05882

SEQUENCE DESCRIPTION:

GATCTGAAAT ACCATCTCTA CCAGAGACTC TGGGAAAAAT AATGGATTCC AAGTGTAAA 60  
 CGGAATTAAG TTTGGCCTAA AACTGCCTCT GTACATAGTG ACTTATAACC TCACTTAATG 120  
 TATAAGCAAA CTGGGACCTG ACTTGAGAGT ACACCTCTGT AACAAAGCAGC AGAGTCTCAC 180  
 CAATCACATG CTGAAGGCTC CCAAAACATG NCTATGTGAG GTGGAGGCCTG ACCTGCAGTC 240  
 AGTCTGGCCA TGTACATGNG TCTTCCCTT NCTGTGGCTA TAAATAATA CAGCCTGNAC 300  
 ACANCGGACA GGNGGACCGT TCTGNACCAN GNTTGGGTCC TGNGNGNTAC CNAGGTNGAN 360  
 GNAACTTTT TTNNGCTCAN TTAAACTGN 389

SEQ ID NO:4940

LENGTH:131

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05885

SEQUENCE DESCRIPTION:

GATCTCTCCG CCTTAGTTAA GAGCATGTGT CGGGAAATTC CTCAGAGTGC TCAGAGTCCC 60  
 TGTATNTTTA TACCTTTTA CAATGTTAAC TGTCAGAAC TGNTTTTGT AACAAAACCT 120  
 NNTGTTTAA A 131

SEQ ID NO:4941

LENGTH:115

TYPE:nucleic acid

TOPOLOGY:linear

2153480

CLONE:HUMGS05886

SEQUENCE DESCRIPTION:

GATCATGGCG CAGTTGGNCA GGAGATGTTC TGCCCCATCT GCTGTAGCGA ATATGTGAAG 60  
TGGGAGGTGG CAACNGAGCT GCCNTTCCAC CACTATTNCC ACAAGCCGTG TGTNN 115

SEQ ID NO:4942

LENGTH:105

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05887

SEQUENCE DESCRIPTION:

GATCCTCCCG CCTTNGTCTG CCAAAGCACT NGGGTTACAG ATGTGAGCCA CTNCACCCAG 60  
CTTAATCTTN ATAAATCTCC ATCCCCATTA CTCTGGTTCA CCCNN 105

SEQ ID NO:4943

LENGTH:350

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05888

SEQUENCE DESCRIPTION:

GATCACGGAC GTGCAGGCTCG CCATCTNCGN CAACATGCTG GGCAGTGTCCC TCTTCTNGCT 60  
TGTNGTTCTC TATCACTACG TGGCCGTCAA CAATCCCAAG AAGCAGGANT GAAAGTGGCG 120  
CTTTCTCCGC CCCAGGGTTC CAGGACATAG TCTGAGGCAA GATGGAGGGT ATGAGGGGCC 180  
TTCACACTNC ACTTCATCCC TTCTACCCAT CACAACATAC AAAGCAACTA CACCTGGGAT 240  
TTTNCCAAGC AGCTTTNATT TCCTCAGNGT CTTCCTTAAT CCTATGGGNA CANGGAAGCT 300  
GCCACTNGNN TAGGGNCCAG TATAAGGGGC TTNGCTTTT TAACTGCNTN 350

SEQ ID NO:4944

LENGTH:304

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05889

SEQUENCE DESCRIPTION:

GATCCAGCGG CAGTGACAGA ATCCAAAGAG GGAACAGAGG CATCAGCATC GAAGGGGCTG 60  
GAGAAGAAAAG AGAAATGATG CAGCTGGTGC CCGAGCCTCT CAGGGCCAGA CCAGACAGAT 120  
GGGGGCTGGG CCCACACAGG CGTGCACCGG GTAGAGNGCA CAGGTAGGCC AAGGGGNAGC 180  
TCCCAGGACA GGGCAAGGGG GCACGCANGGA TACCTGCNAG CCAGGGNCTC TNTGGCCTNT 240  
NTTTTCCTAN TCCNTTTTT TGGCCCTTCT TTTTTNTNTG CCGTACANCN TGCAGGCAA 300  
AGNN 304

SEQ ID NO:4945

LENGTH:64

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05890

01512

2153480

SEQUENCE DESCRIPTION:

GATCAAAACA AAACAAAAAA GTTGTCTCTG AAAAAAAAAC AAAACAAAAA AGTTGTCTCT 60  
GAAA 64

SEQ ID NO:4946

LENGTH:136

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05892

SEQUENCE DESCRIPTION:

GATCACCTT TGTNTGCGAG GGTCTAAGTA GGGTCGAACA CAGAAGTGGG AAGNAGAGGG 60  
GTGGGCCAGG GGCTAATGGT GTCACTGTGT AAAGTTTG ACATACTAGC TCTATAAATA 120  
TATGAATATG GACAA 136

SEQ ID NO:4947

LENGTH:162

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05893

SEQUENCE DESCRIPTION:

GATCCTCTGC TACCAAACAA TGATGTGGAT TCTTTGCAC AGAAATATT AAGGTGGGAT 60  
GGTAAAAAAAT GTCACAAAAG ACTCCTCACC AATACTTNAT GTTGATATCA CTTAATATTA 120  
ACCAGACTTT GCTGTATTGC AATAAAACAG AGAACTGTTA AA 162

SEQ ID NO:4948

LENGTH:405

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05894

SEQUENCE DESCRIPTION:

GATCATCGCC TCCCTGGTTT ATAGTAGACA GACCTTTCT GTTTTCATC CGACATAATC 60  
CTACAGGTGC TGTGTTATTC ATGGGGCAGA TAAACAAACC CTGAAGAGTA TACAAAAGAA 120  
ACCATGCAAA GCAACGACTA CTTGCTACG AAGAAAGACT CCTTCCTGC ATCTTCATA 180  
GTTCTGTTAA ATATTTTGT ACATCGCTTC TTTTCAAAAA CTAGTTCTTA GGAACAGACT 240  
CGATGCAAGT GTTCTGTT TC TGGGAGGTAT TNGAGGGAAA AANCAAGCAG GATGGCTGGA 300  
ACACTGTACT GAGGAATGAA TAGAAAGGCT TCCAGATGTC TAAAAAGATT CTTTAAACT 360  
ACTGNAACTG TTACCTAGGT TAACCANCCC TGTTGAGGT ATTIN 405

SEQ ID NO:4949

LENGTH:330

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05895

SEQUENCE DESCRIPTION:

GATCTGCTCG GAATCCTCCT GCTAAAGAAG GNTCTGGCG TGAGCTCAGC CGCCCCGCAC 60

01513

2153480

CCCAAATCCA GTACAGGAGG CTGCTGGTAC AAATACTGCA GTAATGACAC CAATAATGGG 120  
GCAGACACAA CAGCGTGGCT TAGATTGTGC CCACCNAGGG AAGGTGCTGA ATGGGACCT 180  
GTTGATGGCC CCATCTGGAT GTAAAATCCTG AGCTCAAATC TCTGTTACTC CATTACTGTG 240  
ATTTCCTGGCT GGGTCACCAAG AAATATCGNT GATNCAGACA CAGATTATTG TTCCTGCTGT 300  
ATTTGCTGGT TTNCCTGGTT GAATTGGTTN 330

SEQ ID NO:4950

LENGTH:308

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05896

SEQUENCE DESCRIPTION:

GATCCAGAAT TTATTAGTTT AAAATGCAGG TGAACCTTTT TTTGCCTTG GTTTACTTGT 60  
CTGTCAAATG TTTCCTTAAA CATGAAACTG AATAAGGAGA AGAGTATTT TAACACTTAA 120  
ATTTCCTGGC AAATTTAAA ACATTTTNA GTCTGTAATA CACTCCACTT GANGCACTTA 180  
AGTNTTCCTT AAATGACTTT CCTTAGGTAA TGATACTGGT GTGTTTCCN AAGGCCCTT 240  
AAAAAAAGTN TNNNTAANTG ACTATCTGTT GAAANGGTGT CCTGTCCTT NCTNCTAGNA 300  
ATNTGGGN .308

SEQ ID NO:4951

LENGTH:97

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05897

SEQUENCE DESCRIPTION:

GATCGGAAGC AGAAGATGGC CTTCTTAAAG AGTTTACAAG AATTTATGGC AAATGTTGGT 60  
GGTCTCCTT GTGAAAATA AACAAACAGAA CTTTAAA 97

SEQ ID NO:4952

LENGTH:229

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05898

SEQUENCE DESCRIPTION:

GATCTGATAT TAAAACATCC AGTAGTACGA GTCTGTTAT TGAATTTAT GGTCCCTTC 60  
TTTGATGGTG CTTGCAGGT TTCTAGGTAG AAATTATTC ATTATTATAA TAAAACAATG 120  
TTTGATTCAA AATTGAACA AAATTGTTT AAATAAAATG TCTGTATAACC AGTACAAGTT 180  
TATTGTTCA GTATACTCGT ACTAATAAAA TAACAGTGCC AATTGCAA 229

SEQ ID NO:4953

LENGTH:144

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05899

SEQUENCE DESCRIPTION:

01514

2153480

GATCCAGAGC CCCTCCCCAT CTTCCTCTCT CTAACAAACAA CCCTACCCCC CATTGCCACC 60  
TTCACTCCTG TGTCTCCAGC TGATTAGCCT CAGACTCTTC TTNTATTGTT TTTCTTTGT 120  
AAATAAAAAG CACCAGGTTCAAA 144

SEQ ID NO:4954

LENGTH:105

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05900

SEQUENCE DESCRIPTION:

GATCCGTGCC CTGTAAAATG GATATNATGT TTTACTGATG TCTNTAATAC ATTTGAAAC 60  
TTCCAATAAA ATTTGAATAA AAGAAATNTT GCCATTCTTC TCAGA 105

SEQ ID NO:4955

LENGTH:325

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05902

SEQUENCE DESCRIPTION:

GATCTGGCAG CCCTGGAGAG GGACTATGAG GAAGTGGCGC AAAGTTCTG AGGCATGTAT 60  
GATGGGTGCA AATGAATGTC AAGTTAAAAT GGCAATGTTT CTTTCAGC CGNTATATGC 120  
CTAGTGGGTA GTTCCCTGA TGAGCAGAAA AATTGAACTC AAATCAGGCA AGACTCTAGG 180  
NTCCACACTA AATTAAGTGG GTCACTGANC NCANTGANCA CATTATTCC TGGTCTACTG 240  
GGTACANGTC AGCTCTGCTT ACCTGNGGAG CNTTTGGAA GCTTAAGAGT NCTTTGAAC 300  
CTGGCTTGAG GTCAACTTGT TAGGN 325

SEQ ID NO:4956

LENGTH:321

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05903

SEQUENCE DESCRIPTION:

GATCTGTACA GACAGGACAG AATGAAACTC CTGCGGCTCT TTGGCCTGAA AGTTGGGAAT 60  
GGTTGGGGGA GAGAAGGGCA GCAGCTTATT GGTGGTCTTT TCACCATGG CAGAACAGT 120  
GAGAGCTGTG TGGTGCAGAA ATCCAGAAAT GAGGTGTAGG GAATTTGCC TNCCCTCCTG 180  
CAGACCTGAG CTGGCTTTGG AATGAGGTAA AAGTGTCAAGG GACGTTGCCT GAGCCAAAT 240  
GTTGTAGTGT GGTCTGGCA GGCAGACCTT TTAGGNTTT NCTGCTTAG TTCCTGAGGN 300  
ANNTNGGNCA CTCTTNTNT N 321

SEQ ID NO:4957

LENGTH:313

TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS05907

SEQUENCE DESCRIPTION:

01515